



FRIDAY, SEPTEMBER 28.

Train Accidents in August.

The following accidents are included in our record for the month of August:

COLLISIONS.

REAR.

On the morning of the 1st a freight train on the New York, Lake Erie & Western road ran into a coal train at Jefferson Junction, Pa., damaging several cars.

On the morning of the 7th a freight engine on the Pennsylvania Railroad while shifting at Oliphant, Pa., ran into some coke cars, wrecking several cars and killing two brakemen.

On the morning of the 7th a freight train on the Buffalo, New York & Philadelphia road broke in two near Aurora, N. Y., and the rear section ran into the forward one, wrecking seven cars.

On the afternoon of the 9th a freight train on the Louisville, New Albany & Chicago road broke in two near Bainbridge, Ind., and the rear section ran into the forward one, wrecking several cars.

On the evening of the 9th a passenger train on the West Jersey road ran over a misplaced switch and into a passenger train standing on a siding in Woodbury, N. J., driving it forward into a third passenger train, wrecking a car, killing one man and injuring four others.

On the afternoon of the 10th a coal train on the Central Railroad of New Jersey ran into a preceding coal train near Wilkesbarre, Pa. An engine was damaged, 25 coal cars wrecked and a brakeman killed.

On the morning of the 13th a freight train on the New York, Lake Erie & Western road ran into the rear of another freight which had stopped at Bergen, N. J., to take on some cars. The caboose was wrecked, the engine and two cars damaged, and a man in the caboose scalded by steam from the engine. There was a fog at the time, and a brakeman had been sent back with a signal, but did not go far enough.

On the afternoon of the 13th the second section of a circus train on the Delaware, Lackawanna & Western road ran into the rear of the first section near Chenango Forks, N. Y., damaging the engine and three cars.

On the afternoon of the 14th a freight train on the Pennsylvania Railroad ran into some cars which had broken loose from a preceding freight in Jersey City, N. J., wrecking a car.

On the afternoon of the 15th a yard engine on the Chicago & Northwestern road ran into the rear of a construction train near Quinnesec, Mich., wrecking the engine and one car and injuring two train men fatally.

On the evening of the 15th a freight train on the Chicago & Northwestern road ran into a preceding freight near Chicago. The engine and 9 cars were damaged and a fireman hurt.

Very early on the morning of the 17th a passenger train on the Atlanta & Charlotte Air Line road ran over a misplaced switch and into a freight train standing on a siding in Charlotte, N. C. The engine was badly broken, and the fireman was caught between the engine and tender and crushed to death.

On the morning of the 17th a freight train on the Chicago & Northwestern road ran over a misplaced switch and into some freight cars standing on a siding in Calvary, Wis. The engine and nine cars were piled up in a bad wreck.

On the morning of the 17th a passenger train on the Philadelphia, Wilmington & Baltimore road ran into a freight train near Angora, Pa., wrecking several cars, killing one trainman and injuring another.

On the evening of the 17th, as a milk train on the New York, Susquehanna & Western road was approaching Two Bridges, N. J., a helping engine, which had come up the grade from Odensburg with the train, was detached, and ran on ahead into a siding. For some reason the switch was not turned, the train followed the helper into the siding and both engines were badly damaged and two trainmen hurt.

On the morning of the 18th a freight train on the Indianapolis & St. Louis road ran into a preceding freight on a trestle near Hadley, Ind., wrecking a car. The engine was thrown over on its side across the trestle, blocking the road all day.

On the evening of the 20th a freight train on the Pennsylvania Railroad ran into the rear of a passenger train which had been stopped by an accident at Germantown Junction, Pa. One car was slightly damaged.

About noon on the 21st a passenger train on the Pittsburgh & Lake Erie road ran over a misplaced switch and into a freight train standing on a siding in Hazleton, O. The engine and two freight cars were wrecked, five trainmen seriously injured and five passengers slightly hurt.

On the afternoon of the 21st a freight train on the New York Central & Hudson River road ran over a misplaced switch and into some freight cars standing on a siding in Herkimer, N. Y. The engine and seven cars were badly damaged, and the conductor hurt.

On the evening of the 21st a freight train on the Indianapolis & St. Louis road ran into a preceding freight near Danville, Ind., damaging several cars.

Very early on the morning of the 22d a freight train on the New York Central & Hudson River road ran into a preceding freight which had stopped near Port Byron, N. Y., to cool a hot box. Some damage was done and a fireman hurt.

On the morning of the 22d a freight train on the New York, Lake Erie & Western road ran into the rear of a passenger train which had stopped at Middletown, N. Y. A passenger car was wrecked. The passenger train was on time.

On the morning of the 24th a freight train on the Wabash, St. Louis & Pacific road broke in two near Wabash, Ind., and the rear section ran into the forward one, wrecking several cars.

On the morning of the 24th a freight train on the Galveston, Houston & Henderson road ran over a misplaced switch and into another freight train standing on a siding in Galveston, Tex. The engine and five cars were badly damaged.

On the evening of the 24th a passenger train on the Louisville & Nashville road ran over a misplaced switch and into a freight train standing on a siding at Lebanon Junction, Ky. Both engines and several cars were damaged and two trainmen hurt.

On the evening of the 25th a freight train on the Baltimore & Ohio road broke in two near Zedeker Crossing, Pa., and the rear section ran into the forward one, wrecking three cars. The engineer was slightly hurt.

Very early on the morning of the 26th a freight train on

the Baltimore & Ohio road broke in two near Coon Island, Pa., and the rear section ran into the forward one, wrecking four cars.

On the night of the 27th a freight train on the Nashville, Chattanooga & St. Louis road ran into some cars which had been left on the track in the yard in Nashville, Tenn., damaging two of them.

On the night of the 27th a freight train on the Cleveland & Pittsburgh road ran into some cars which had been left on the main track at Mingo Junction, O. The engine was damaged and two freight cars wrecked.

On the morning of the 28th a freight car which had been switched off by a passenger train on the Ganpete Valley road at Nephi Summit, Utah, got away from the man who had charge of it and ran off down grade after the train. It struck the rear end of the train, damaging a car and injuring four passengers.

On the morning of the 29th an engine on the New York, Lake Erie & Western road ran into a coal train in the yard at Port Jervis, N. Y., wrecking two cars.

On the morning of the 29th a freight train on the Union Pacific road ran into a preceding freight near Waterloo, Neb., damaging eight cars. There was a dense fog at the time.

On the morning of the 31st a freight train on the New York, Lake Erie & Western road broke in two near Binghamton, N. Y., and the rear section ran into the forward one, wrecking several cars and blocking both tracks two hours.

BUTTING.

On the morning of the 1st there was a butting collision between two freight trains on the Troy & Boston road near Pownal, Vt. The engines were completely wrecked, and 50 cars were piled up in a very bad wreck, which caught fire in a few minutes and was almost entirely destroyed. Six trainmen were killed or burned to death, and three others were hurt. A brakeman, although badly injured, ran back and flagged a passenger train which was nearly due. The accident was caused by the mistake of an operator, who, it is said, was only 17 years old and had been on duty 15 hours.

On the afternoon of the 4th there was a butting collision between two freight trains on the Louisville & Nashville road near Williamsburg, Ky., caused by a mistake on the part of the trainmen. Both engines and five cars were damaged.

On the evening of the 4th there was a butting collision between a freight train and a yard engine on the Texas & Pacific road at Longview Junction, Tex., by which both engines and two cars were wrecked and a brakeman killed.

On the morning of the 6th there was a butting collision between a passenger train and a wild engine on the Toledo, Cincinnati & St. Louis road near Frankfort, Ind., by which both engines were badly wrecked.

On the night of the 8th there was a butting collision between a regular and a switching passenger train on the Manhattan Elevated road at the Cortlandt street station in New York. The engine and a car were damaged, the engineer killed and a passenger hurt.

On the night of the 9th there was a butting collision between two switching freight trains on the Texas & Pacific road in the yard at Fort Worth, Tex., and three cars were wrecked.

Very early in the morning of the 10th there was a butting collision between two freight trains on the Union Pacific road near Kearney, Neb., by which both engines and seven cars were badly damaged.

On the morning of the 10th there was a butting collision between two freight trains on the New York, Lake Erie & Western road in the yard at Binghamton, N. Y. Both engines were slightly damaged.

On the morning of the 11th there was a butting collision between a regular freight and a circus train on the Kentucky Central road near Rensselaer, Ky. Both engines were damaged.

On the morning of the 15th there was a butting collision between a wild engine and a ballast train on the St. Louis, Iron Mountain & Southern road, near Cadet, Mo. Both engines and several cars were wrecked, two trainmen killed and three others hurt.

On the afternoon of the 15th there was a butting collision between two yard engines, on the Rochester & Pittsburgh road, in Rochester, N. Y., but the damage was very slight.

On the afternoon of the 17th there was a butting collision between two yard engines on the Pennsylvania Railroad in the yard in Philadelphia. Both were damaged.

On the morning of the 18th there was a butting collision between two freight trains on the Chesapeake & Ohio road near Roncove, W. Va., by which both engines and 20 cars were wrecked and a fireman hurt.

On the night of the 22d a freight train on the Ohio & Mississippi road left a part of the train standing on a grade near Caseyville, Ill., the train being too heavy for the engine to get over the grade. The detached cars started off and ran back seven miles and into the head of a following freight. The engine and two cars were wrecked and a trainman killed.

On the morning of the 25th there was a butting collision between two freight trains on the Louisville & Nashville roads near Chef Menteur, La., by which both engines and several cars were wrecked and three trainmen hurt.

On the evening of the 25th there was a butting collision between two freight trains on the Cleveland, Columbus, Cincinnati & Indianapolis road near Anderson, Ind., by which both engines and 14 cars were badly damaged.

On the afternoon of the 26th there was a butting collision between two freight trains on the Canadian Pacific road, near Rat Portage, Manitoba. Both engines and seven cars were wrecked, a brakeman killed and the road blocked 12 hours.

Very early on the morning of the 27th, there was a butting collision between a passenger and a freight train on the Pittsburgh, Cincinnati & St. Louis road, near Mingo Junction, O. Both engines, the mail and baggage cars, and four freight cars were badly wrecked; a postal clerk was fatally hurt and five trainmen less severely injured. The conductor of the freight had orders to meet the express, but did not obey them.

On the afternoon of the 27th, there was a butting collision between an ore train and a ballast train on the Central Railroad of New Jersey, near Middle Valley, N. J. Both engines were damaged and 25 ore cars piled up in a bad wreck.

On the morning of the 28th, there was a butting collision between two freight trains on the New York, Ontario & Western road, near Pratt's Hollow, N. Y. Both engines were damaged.

CROSSING.

On the afternoon of the 8th a Wabash, St. Louis & Pacific freight ran into a St. Louis & Cairo freight at the crossing in Cairo, Ill., wrecking several cars.

On the morning of the 17th a passenger train on the Elizabeth, Lexington & Big Sandy road ran into a Kentucky Central freight train at the crossing of the two roads at Winchester Crossing, Ky. The engine of the passenger train struck a freight car in which were loaded 400 kegs of giant powder, and a terrific explosion followed, utterly wrecking and destroying the engine, four freight cars and

the station building. Both conductors were killed and five others, all trainmen or yardmen, were hurt.

Very early on the morning of the 19th a freight train on the St. Louis Bridge road ran into an Ohio & Mississippi freight at the crossing in East St. Louis, Ill., knocking the engine over and piling several cars on top of it.

On the evening of the 22d a Cleveland, Columbus, Cincinnati & Indianapolis yard engine ran into a Cincinnati, Hamilton & Dayton freight train at the crossing in Dayton, O., doing some damage.

On the evening of the 24th a Philadelphia & Erie freight train ran into a Philadelphia & Reading freight at the crossing in Milton, Pa., wrecking several cars.

On the morning of the 28th a New York, Lake Erie & Western freight train ran into a New York Central & Hudson River passenger train at the crossing in Buffalo, N. Y., damaging one car and injuring a passenger.

DERAILMENTS.

BROKEN RAILS.

On the morning of the 7th a freight train on the New York, Lake Erie & Western road struck a broken rail near Savona, N. Y., and nine cars were thrown from the track.

About noon on the 25th a passenger train on the Wabash, St. Louis & Pacific road struck a broken rail near Moberly, Mo., and the whole train was thrown from the track. The baggage car was wrecked.

BROKEN FROG.

On the morning of the 2d two cars of a passenger train on the Pittsburgh & Western road were thrown from the track near Wittner, Pa., by a broken frog.

On the evening of the 18th the engine and two cars of a freight on the Intercolonial road were thrown from the track at Nauwigewauk, N. B., by a defective frog.

BROKEN SWITCH-ROD.

On the morning of the 31st a car of a passenger train on the Cleveland & Pittsburgh road was thrown from the track at Ravenna, O., by a broken switch-rod. The car was thrown over against a freight train on a siding and badly broken. A brakeman who was standing by the freight was killed.

On the morning of the 30th a passenger train on the Philadelphia & Atlantic City road was thrown from the track at Pleasantville, N. J., by a broken switch-rod. The engine passed over safely, but its weight jarred the switch out of place and five cars were thrown from the track, upset down the bank and badly broken. Three trainmen and 25 passengers were hurt, besides a number slightly bruised.

BROKEN BRIDGE.

On the afternoon of the 21st a trestle bridge on the Memphis & Little Rock road near Forest City, Ark., gave way under a passenger train, and the engine went down 15 ft., with two cars piled upon top of it. Two passengers were killed, one injured so that he died that night, and 11 others less seriously hurt.

On the night of the 29th a freight train on the International & Great Northern road broke through a wooden bridge near Crockett, Tex., which had been partially destroyed by fire. The whole train went down into the creek in a bad wreck, killing two brakemen and injuring the engineer.

SPREADING OF RAILS.

On the evening of the 1st a passenger train on the South-eastern Railway, of Canada, was thrown from the track near Newport, Vt., by the spreading of the rails. The whole train left the track, and one car was badly broken, injuring three trainmen and nine passengers.

On the morning of the 9th four cars of a freight train on the Gulf, Colorado & Santa Fe road were thrown from the track near Kopperi, Tex., by the spreading of the rails.

On the afternoon of the 14th a passenger train on the Toledo, Cincinnati & St. Louis road was thrown from the track near Abanaka, O., by the spreading of the rails, and the engine upset, scalding the engineer badly.

On the morning of the 15th several cars of a freight train on the Buffalo, New York & Philadelphia road were thrown from the track near Iseus, N. Y., by the spreading of the rails.

On the afternoon of the 15th a freight train on the Missouri Pacific road was thrown from the track near Pacific, Mo., by the spreading of the rails. Eight cars were wrecked and a lot of cattle killed.

About noon on the 18th a local passenger train on the Central Pacific road was thrown from the track in Oakland, Cal., by the spreading of the rails, caused, it is said, by the intense heat and insufficient allowance for expansion.

On the evening of the 23d a passenger train on the Texas & St. Louis road was thrown from the track near South Rosque, Tex., by the spreading of the rails, and two passengers were hurt. One car rolled over down a bank.

BROKEN WHEEL.

On the afternoon of the 2d four cars of a freight train on the New York Central & Hudson River road were thrown from the track in Utica, N. Y., by a broken wheel.

On the night of the 7th a freight train on the New York, Lake Erie & Western road was thrown from the track near Calicoon, N. Y., by a broken wheel under the tender.

On the morning of the 15th six cars of a coal train on the Northern Central road were thrown from the track near Watkins, N. Y., by a broken wheel.

BROKEN AXLE.

On the morning of the 10th several cars of a coal train on the Central Railroad of New Jersey were thrown from the track near Elizabethport, N. J., by a broken axle.

On the 10th a freight train on the Chicago, Burlington & Quincy road was thrown from the track near Louisville, Neb., by a broken axle, and 13 cars were wrecked.

On the morning of the 14th a car of a passenger train on the Illinois Central road was thrown from the track near Kankakee, Ill., by a broken axle.

On the afternoon of the 20th seven cars of a freight train on the Pennsylvania Railroad were thrown from the track at Frankford Junction, Pa., by a broken axle.

On the afternoon of the 23d the engine of a passenger train on the New York Central & Hudson River road was thrown from the track at Lyons, N. Y., by a broken track axle.

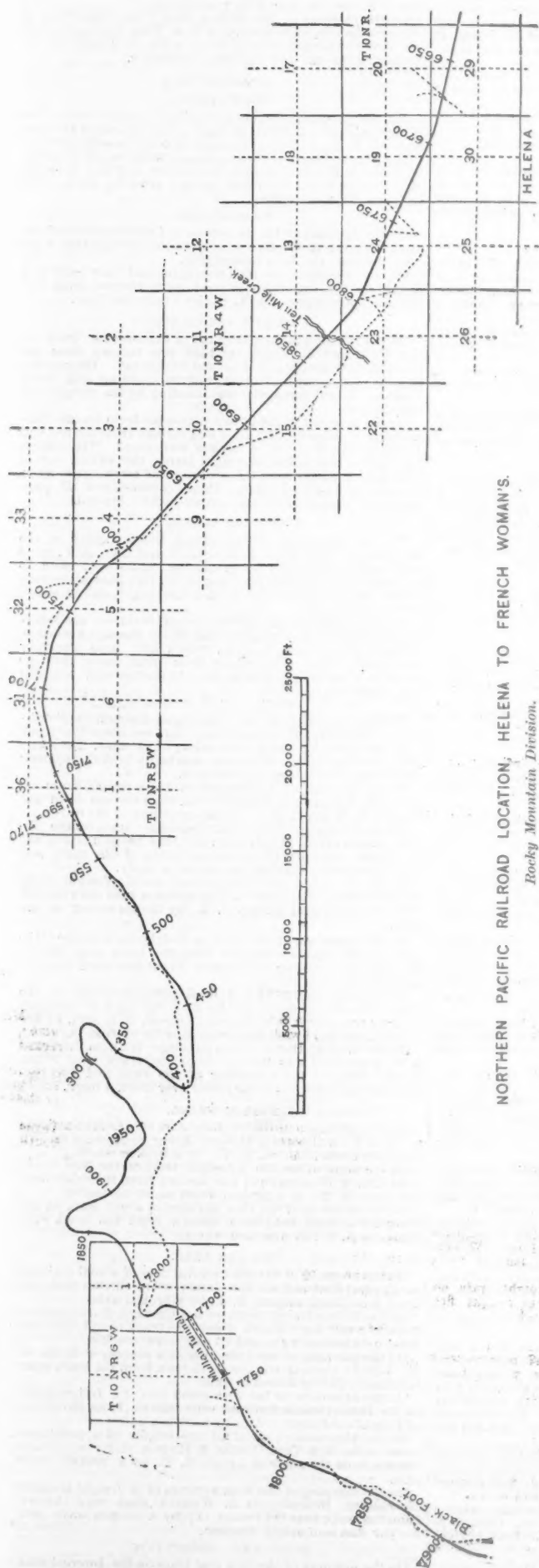
On the morning of the 30th five cars of a freight train on the Indiana, Bloomington & Western road were thrown from the track near Stillwater, O., by a broken axle, and one car was completely wrecked.

ACCIDENTAL OBSTRUCTION.

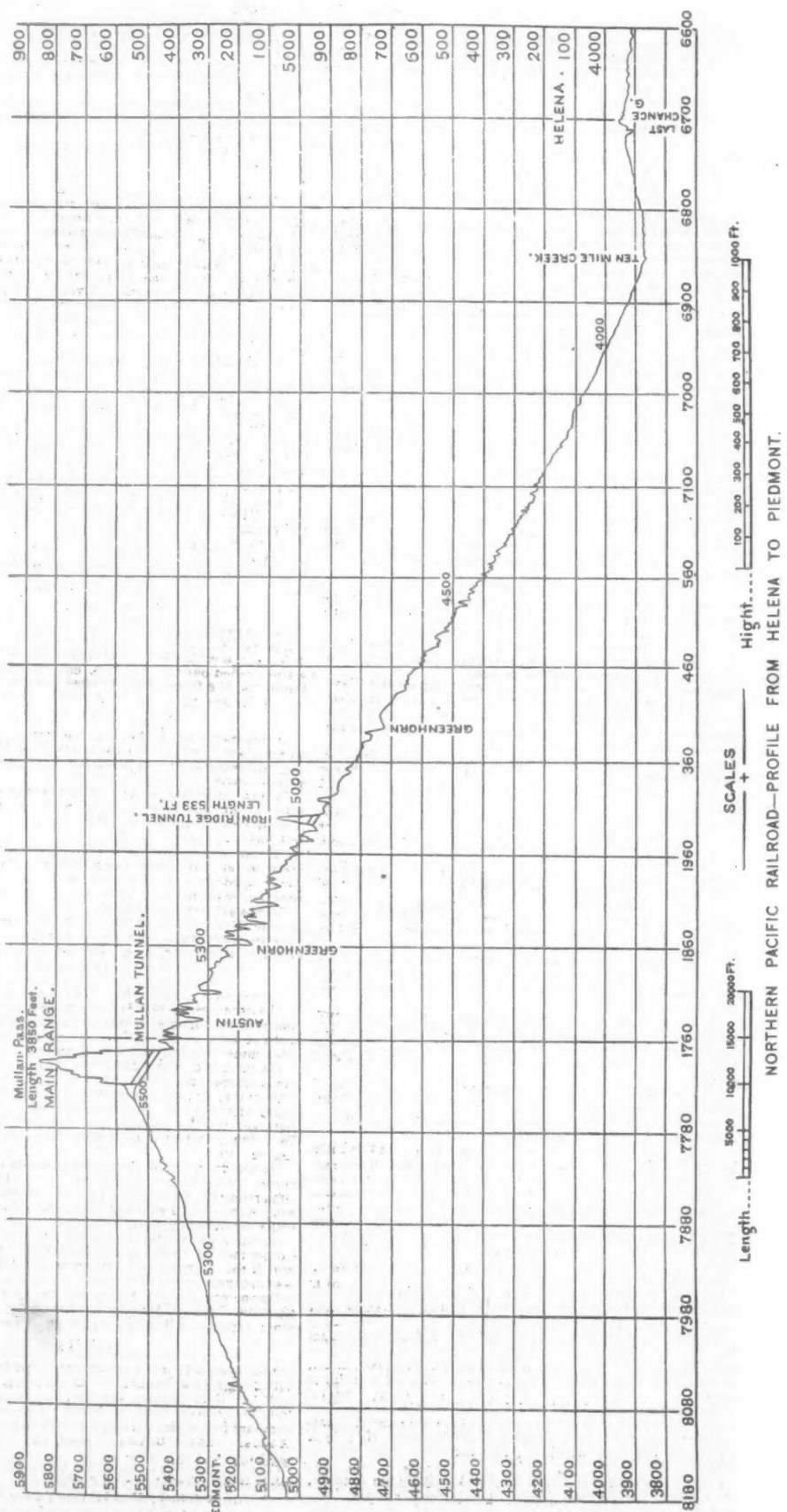
On the morning of the 2d a coal train on the Intercolonial road struck a push-car loaded with ties, which some trackmen had left standing on the track near Spring Hill, N. S. The engine and eight cars were thrown from the track and badly broken, and a fireman was killed.

On the morning of the 3d a passenger train on the Boston, Winthrop & Point Shirley road was thrown from the track near Winthrop Junction, Mass., by a brake beam falling down on the rails.

On the morning of the 17th two cars of a freight train on the New York Central & Hudson River road were thrown



NORTHERN PACIFIC RAILROAD LOCATION, HELENA TO FRENCH WOMAN'S.
Rocky Mountain Division.



Length... 20,000 Ft. Scales + Height... 1000 Ft.
NORTHERN PACIFIC RAILROAD—PROFILE FROM HELENA TO PIEDMONT.

from the track in Rochester, N. Y., by a brake-beam which fell down on the rails.

On the morning of the 22d a freight train on the Vicksburg & Meridian road struck a push-car loaded with lumber at Four-Mile Bridge, Miss., and the engine and two cars were thrown from the track and went off the bridge, falling 35 ft. into a ravine in a bad wreck. The engineer jumped and was hurt.

CATTLE ON TRACK.

Very early on the morning of the 3d a passenger train on the Baltimore & Ohio road ran over a cow near Edinburg, Va., and the engine and one car were thrown from the track and rolled over down a bank. A brakeman was killed and the engineer and fireman so badly scalded that both died next day.

On the afternoon of the 7th a freight train on the St. Louis Bridge road ran over a hog on the approach to the Bridge in East St. Louis, Ill., and six cars were thrown from the track, three of them falling some 15 ft. to the ground below.

On the morning of the 9th a freight train on the Houston & Texas Central road ran over a cow near Waco, Tex., and the engine and five cars were thrown from the track. The engineer was slightly hurt.

On the morning of the 16th a freight train on the Windsor & Annapolis road ran over a cow near Lawrence, N. S., and five cars were thrown from the track, injuring two trainmen.

On the morning of the 17th a freight train on the Utah & Northern road, drawn by two engines, ran over a cow near Butte, Mont., and both engines and several cars were thrown from the track and down a bank and badly wrecked. A fireman was killed.

On the morning of the 17th a freight train on the Chesapeake, Ohio & Southwestern road ran over a cow near Memphis, Tenn., and the engine was thrown from the track. The engineer and fireman were hurt.

Very early on the morning of the 29th a passenger train on the Wabash, St. Louis & Pacific road ran over a cow near Clifton, Mo., and the engine and two cars were thrown from the track. The engine upset, killing the engineer.

WASH-OUT.

On the evening of the 13th a passenger train on the Chicago, Burlington & Quincy road ran into a wash-out near Edicott, Neb., and the engine and ore car were wrecked.

WIND.

On the evening of the 21st a freight train on the Chicago & Northwestern road was blown from the track at Zumbrota Junction, Minn., and the engine and five cars were wrecked. The fireman was killed.

OPEN DRAW.

On the afternoon of the 18th the engine and tender of a passenger train on the Louisville & Nashville road went through the open draw of a bridge near Mobile, Ala. The engineer went down with his engine and was drowned.

MISPLACED SWITCH.

On the night of the 1st the engine of a freight train on the Chicago, Milwaukee & St. Paul road was thrown from the track at Beaver Dam, Wis., by a misplaced switch.

On the morning of the 6th four cars of a freight train on the Boston & Albany road were thrown from the track in the Boston yard by a misplaced switch.

On the morning of the 9th a freight train on the Cleveland, Lorain & Wheeling road was thrown from the track and wrecked near Massillon, O., by a misplaced switch. The engineer and fireman were killed and three other trainmen hurt.

On the afternoon of the 13th the engine and one car of a passenger train on the New York Central & Hudson River road were thrown from the track in Hudson, N. Y., by a misplaced switch.

On the afternoon of the 14th several cars of a freight train on the Cincinnati, Hamilton & Dayton road were thrown from the track in Glendale, O., by a misplaced switch.

On the morning of the 15th a freight train on the New York Central & Hudson River road ran over a misplaced switch and upon a siding leading over a coal trestle. Before the train could be stopped the engine ran off the end of the trestle and fell 12 ft. with a number of cars on top of it. The engineer was killed.

On the night of the 16th the engine and four cars of a freight train on the Raleigh & Gaston road were thrown from the track at Franklinton, N. C., by a misplaced switch. The engineer and fireman were hurt.

On the morning of the 23d a passenger train on the New York, Pennsylvania & Ohio road was thrown from the track at Red House, Pa., by a misplaced switch. The tender and two cars were badly broken and 5 passengers slightly hurt.

On the night of the 23d the engine and six cars of a freight train on the Mobile & Ohio road were thrown from the track at Waynesboro, Miss., by a misplaced switch.

MALICIOUS.

On the morning of the 19th a freight train on the Mobile & Ohio road was thrown from the track near Meridian, Miss., where a rail had been taken from its place, the fastenings having been removed by some persons unknown, whose intention probably was to plunder the expected wreck. The engine and 7 cars left the track, but little damage was done.

UNEXPLAINED.

Very early on the morning of the 3d a freight train on the Indianapolis & St. Louis road ran off the track near Vermillion, Ill., blocking the road several hours.

Very early on the morning of the 3rd the engine and eight cars of a freight train on the Texas & Pacific road ran off the track at Colorado, Tex., and two cars were wrecked.

On the morning of the 6th 15 cars of a freight train on the Chesapeake, Ohio & Southwestern road ran off the track near Knoxville, Tenn., and were wrecked, injuring a brakeman.

On the morning of the 7th the engine of a passenger train on the Boston & Albany road ran off the track near Winchendon, Mass., and upset down a bank.

On the morning of the 8th a yard engine on the New York Central & Hudson River road ran off the track in the passenger station in Buffalo, N. Y., tearing up part of a platform.

On the night of the 9th the engine and three cars of a freight train on the Oregon Railway & Navigation Co.'s road ran off the track near the Dalles, Oregon, doing some damage.

On the morning of the 10th five cars of a freight train on the New York Central & Hudson River road ran off the track in Buffalo, N. Y., and were wrecked.

On the morning of the 10th several cars of a coal train on the Central Railroad of New Jersey ran off the track near Brill's, N. J., and were wrecked.

On the morning of the 11th several cars of a freight train on the Eastern Railroad ran off the track in Kittery, Me., and four of them were wrecked.

On the morning of the 11th 40 cars of a coal train on the

Central Railroad of New Jersey ran off the track in Phillipsburg, N. J., and 14 of them were completely wrecked. A brakeman was hurt.

On the evening of the 11th five cars of a coal train on the Central Railroad of New Jersey were thrown from the track near Green Brook, N. J., blocking both tracks an hour.

On the evening of the 11th several cars of a coal train on the Ohio Central road ran off the track in Columbus, O., and were wrecked.

On the morning of the 13th the engine of a passenger train on the Louisville & Nashville road ran off the track at Stanford Junction, Ky., blocking the road an hour.

On the afternoon of the 14th a passenger train on the Toledo, Cincinnati & St. Louis road ran off the track near Elizabethtown, O. The engine was damaged and the engineer hurt.

On the morning of the 17th a car of a construction train on the Lake Shore & Michigan Southern road ran off the track near St. Johns, Ind., and 5 laborers were hurt.

Very early on the morning of the 21st a car of a freight train on the Philadelphia & Reading road ran off the track in Philadelphia and knocked a corner out of an adjoining building.

On the morning of the 23d a freight train on the Utah & Northern road ran off the track near Dillon, Utah. The fireman was hurt.

On the evening of the 23d the tender of a ballast train ran off the track in Rochester, N. Y., on the New York Central & Hudson River road.

On the evening of the 23d a car of a switching passenger train on the Pennsylvania Railroad jumped the track in the Philadelphia yard.

On the afternoon of the 25th a car of a freight train on the Addison & Northern Pennsylvania road ran off the track near Addison, N. Y., and upset.

On the evening of the 25th a freight train on the Louisville & Nashville road ran off the track near Dobson, Tenn., and the engine and two cars were badly broken.

On the morning of the 26th a car of a circus train on the New York Central & Hudson River road ran off the track in Albion, N. Y., and was slightly damaged.

On the afternoon of the 27th two cars of a freight train on the New York Central & Hudson River road ran off the track near Fairport, N. Y., blocking one track two hours.

Very early on the 28th a construction car attached to a freight train on the Missouri, Kansas & Texas road jumped the track near Waco, Tex. Two laborers jumped from the car; one was killed and the other badly hurt.

On the morning of the 30th a New York, West Shore & Buffalo passenger train ran off the track on the Pennsylvania Railroad road in Jersey City, N. J. The engine was thrown diagonally across the opposite track and the baggage car upset. The express messenger was hurt.

On the afternoon of the 31st the engine of a freight train on the Missouri Pacific road ran off the track in St. Louis, doing little damage.

On the evening of the 31st 13 cars of a freight train on the Pennsylvania Railroad ran off the track near Kinzer, Pa., and were wrecked, blocking the road all night.

OTHER ACCIDENTS.

BOILER EXPLOSION.

On the evening of the 20th, as a passenger train on the Northern Central road was near Parkton, Md., one of the tubes of the water-grate exploded. The escaping steam and water rushed out into the cab, carrying burning coals with them, and the force of the explosion threw the fireman over the tender and upon the other track, injuring him badly.

BROKEN CONNECTING ROD.

On the morning of the 14th the engine of a freight train on the New York, Lake Erie & Western road broke a coupling rod when near Binghamton, N. Y., and was considerably damaged.

On the afternoon of the 20th the engine of a passenger train on the New York, Lake Erie & Western road broke a coupling rod when near Jersey City, N. J., and the loose end tore out one side of the cab.

On the morning of the 28th the engine of a passenger train on the New York, Lake Erie & Western road broke a coupling rod when near Goshen, N. Y., and the loose end tore out one side of the cab.

On the afternoon of the 30th the engine of a freight train on the New York, Lake Erie & Western road broke a coupling rod when near Port Jervis, N. Y., and the loose end tore up one side of the engine.

MISCELLANEOUS.

On the night of the 9th, as a freight train on the Norfolk & Western road was near Nottoway Court House, Va., a truck broke under a freight car near the middle of the train and one axle of the truck was, with the wheels, thrown out from under the car and left by the track. The car did not leave the track, although it was dragged three miles before the accident was discovered.

On the afternoon of the 10th a draw-bar broke between the tender of a freight train on the Pittsburgh Southern Division of the Baltimore & Ohio road near Washington, Pa. The Division Superintendent, who was riding on the engine, fell on the track and was killed.

On the night of the 21st a passenger train on the Baltimore & Ohio road struck a heavy timber which had been left projecting from a siding in Wheeling, W. Va. Two cars were scraped all along the sides and three passengers cut badly by broken glass.

On the night of the 22d an axle broke under the express car on the Atchison, Topeka & Santa Fe road near Wakarusa, Kan. The car did not leave the track, but the train was delayed some time.

On the afternoon of the 27th a car of a freight train on the New York Central & Hudson River road caught fire when near Waterloo, N. Y., and was destroyed.

SUMMARY.

This is a total of 144 accidents, in which 42 persons were killed and 136 injured; an increase of 5 accidents, but a decrease of 4 killed and of 86 injured, as compared with August, 1882. The month of August has usually made a very unfavorable showing, and this year is no exception, although there is some improvement over last year.

The eight months of the current year to the end of August show a total of 1,074 accidents, 330 killed and 1,148 injured; a monthly average of 134 accidents, 40 killed and 144 injured. August was above the average in the number of accidents, above it also in killed, but slightly below in injured. There were no notably fatal accidents during the month.

Northern Pacific Nomenclature.

The opening of a new trunk line across the continent suggests some curious comparisons in nomenclature. The five great divisions of Northwestern territory traversed by the

Northern Pacific Railroad are singularly fortunate in their names. Minnesota, Dakota, Montana and Idaho are indigenous words, musical in sound and poetic in significance, and while the noble mountains of the Cascade Range would have supplied many an Indian name to complete the series, it is eminently proper that the most remote quarter of the Union should bear witness to the patriotic reverence for Washington. The long chain of projected towns and ambitious villages within these great territorial divisions stretching from Lake Superior to the Pacific presents in the main a monotonous array of dull and meaningless names. Poverty of invention and lack of imagination are attested by gratuitous imitations, such as New Chicago, New Buffalo, New Salem, Detroit, Cleveland, Moscow, Lisbon and Geneva, and by a long series of the Smith-Brown-Robinson order—Youngs, Taylor, Sprague, Kurtz, Steele, Andrews, Dickinson, Dawson, Thomson, Kimberley, Aldrich, Belknap, and so on until the resources of the average business directory are exhausted. The capital of Dakota informs the Upper Missouri Valley of the mature fame of Bismarck, and an obscure hamlet of the Bad Lands staggers under the eloquent name of Gladstone; and the stalwart heroes of the Indian campaigns—Custer, Miles and Terry—are not forgotten in the distribution of honors; but a majority of the stations on the line of this new steam highway bear the names of obscure pioneers, ranchmen, miners and gamblers, who happened to be the earliest settlers. Sometimes the name is invested with full civic honors, as in the case of Sykeston and Ewartsville, but generally the title stands in its original simplicity, as plain Billings, honest McGregor, refined Livingston, hardy Richardson, humble Hathaway, and laconic Sims.

There are a few characteristic names in Montana, such as Big Horn, Rosebud and Missoula, and several artificial French derivatives in Idaho, such as Pend d'Oreille and Coeur d'Alene, but the choicest flowers in the nomenclature of this new continental route are to be culled in Washington Territory. The earliest settlers on the coast set a bad example in naming a fur-trading station after an enterprising merchant on Manhattan Island and poaching upon classic preserves in calling the capital Olympia, and subsequent map makers have bestowed the honors of majestic mountain masses with lavish hand upon the Hoods, Bakers and Raniers. Theodore Winthrop, in his stirring narrative of his ride from Vancouver's Island to the Columbia, made many an indignant remonstrance against the recklessness with which the water-courses and snow-capped summits were being misnamed. He would not consent to sacrifice the Scandinavian flavor of the expressive word Whulge, and in the name of a critical world sternly demanded why the title of Puget should be "saved from Lethe" and given to "a vast fiord parting rocks and forests primeval with a mighty tide." He insisted that a magnificent mountain should not be insulted with the insignificant name of a single undistinguished biped known as Baker, but should be honored with the more imposing title of Kulshau, which he had learned from the Lummi tribe at its base. The vulgar appellations against which he inveighed have unfortunately prevailed to a large extent. The sound is known as Puget, and the Cascade giants are without honor in the tongue of the white man. But Tacoma, a beautiful Indian word signifying a mountain summit crowned with snow, has been retained not only in the Cascades, but on the coast, where it gives the name to the terminus of the Northern Pacific.

The "passiooks," as the Yankee invaders in Washington were called in the Chinook jargon, have shown greater reverence for the beauties of Indian nomenclature than the unimaginative settlers and plodding immigrants in the great territories eastward in the direction of Lake Superior have displayed. Wallulah, Wakima, Stellacoom, Newaukum, Okinakane, Walla-Walla, Nisqually, Kalama, Seattle, Whatcom and many other names are a heritage from the Klickitats, Shoshones, Klamams and other tribes which once tenanted the shores of Whulge and were content to call every mountain landmark a Tacoma. There are a few French names along the Columbia, for some of the early trappers who sold their furs on the coast and explored the interior were of that nationality. They gave a name to the Dalles, one of the most remarkable freaks of nature in the territory, and a very inadequate word it was. The great falls of Spokane, however, have as legitimate, if not as musical, an Indian name as Niagara.—*New York Tribune.*

Contributions.

Crossing the Main Range of the Rocky Mountains.

Northern Pacific Railroad,
Rocky Mountain Division.

TO THE EDITOR OF THE RAILROAD GAZETTE:

The location of the Northern Pacific Railroad over the main range of the Rocky Mountains presented one of the most important problems on the whole road.

Mullan Pass is the lowest pass available and is about 5,774 ft. above tide-water. By a tunnel 3,850 ft. long the elevation of the summit is reduced to 5,548, and the total ascent from "Ten Mile Creek," two miles west of Helena, to the summit is 1,668 ft.

The distance by the most direct valley is about 13 miles. It was desirable to use a maximum grade not exceeding 116 ft. per mile. In running a line eastwardly down from the proposed tunnel along the most obvious route very considerable detours were required in order to cross the large and deep valleys making down from the mountain side.

One crossing of 221 ft. high being much the most formidable of all, surveys were made with a view of crossing the valley nearer its source, but very serious difficulties were encountered.

At length the idea was developed of turning backward along a slope which is not very steep until the bottom of the main valley was reached. This scheme turned out favorably, and by lengthening the line about 3,000 ft. the cost of construction was reduced over \$250,000.

The accompanying diagrams make the subject plainer than any description.

The scenery along this part of the line is exceedingly interesting, abounding in great contrasts and pleasant surprises. There are no doubt some wilder and more imposing views on some of the less frequented railroads, but it is doubtful if any of the great thoroughfares of the country can convey more pleasurable emotions to the mind of travelers.

J. T. DODGE, Division Engineer.

Ten-Wheel Freight Locomotive by the Brooks Locomotive Works.

The double-page engraving and smaller cuts given this week illustrate a ten-wheel freight locomotive built by the Brooks Locomotive Works at Dunkirk, N. Y., which formed part of the exhibit made by those works at the Chicago Exposition of Railway Appliances. The specifications furnished by the builders for this locomotive are as follows:

GENERAL SPECIFICATION FOR A STANDARD-GAUGE TEN-WHEEL LOCOMOTIVE.

Type.—Ten-wheel pattern.
Gauge.—4 ft. 8½ in.
Cylinders.—19 in. diameter; 24 in. stroke.
Driving Wheels.—Six in number, 56½ in. diameter outside of tire.
Tires.—Flanged, 49½ in. inside diameter; 5½ in. wide, 3 in. thick; forward pair without flange, 6 in. wide.
Boiler.—Wagon-top style. Made of Otis homogeneous cast steel. Diameter at smoke box end 52 in. Thickness of plates, 7-16 in. Flue sheet, ½ in.
Fire Box.—Sloping. Made of Otis homogeneous cast steel, 96 in. long, 34 in. wide at grate, 48 in. wide at crown sheet, 37 in. high at flue sheet. Thickness of plates, side and door sheets, 5-16 in.; crown sheet, ¾ in.; flue sheet, ½ in. Water space, 3 in. sides and back; 4 in. front.

Ash Pan.—Suitable for the fuel, double dampers operated from the footboard.
Heating Surface.—Fire box, 128.41 square feet; flues, 1,422.40 square feet; total heating surface in boiler, 1,550.81 square feet.

Weights.—Weight of engine empty, 84,300 lbs.; weight of engine in working order, 94,500 lbs.; weight on drivers in working order, 73,100 lbs.; weight on engine truck in working order, 21,400 lbs.

Tonnage.—This engine will haul in addition to the weight of engine and tender, the track being in good condition and comparatively free from curves: On a level, 1,774 gross tons; on a 20-ft. grade, 824 gross tons; on a 40-ft. grade, 520 gross tons; on a 60-ft. grade, 370 gross tons; on a 80-ft. grade, 281 gross tons, and on a 100-ft. grade, 221 gross tons.

Andrew Carnegie on the Prospects of the Rail Mills.

The following report of an interview between Mr. Andrew Carnegie and a reporter of the New-York Tribune deserves attention as giving the opinion of an uncommonly sagacious man who has been in England so long that he may be supposed to be exceptionally well informed concerning the condition of the iron industry there as well as here.

A Tribune reporter called one evening last week upon Andrew Carnegie, who recently returned from Europe. Mr. Carnegie was found in his rooms at the Windsor Hotel,

"No, not yet. It will no doubt be a factor of great importance in the future. At present it is not. The life of a steel rail is five times that of an iron rail, and that is five years. Now, the percentage of steel rails in use longer than five years is quite small. The steel rail has entirely taken the place of the iron rail in the United States, and yet at present, in spite of the superiority of the steel rail, it is actually cheaper than the iron rail. The depression in the former is not due to reduced consumption, for in spite of the times this year's consumption will be about a million and a half tons. This fearful depression is caused by the increase in the capacity of works generally, as I stated before. As an instance, take our own works in Pittsburgh, built in 1875 for a production of 25,000 tons. This year we produce more than 150,000 tons."

"What is the present price of steel rails?"

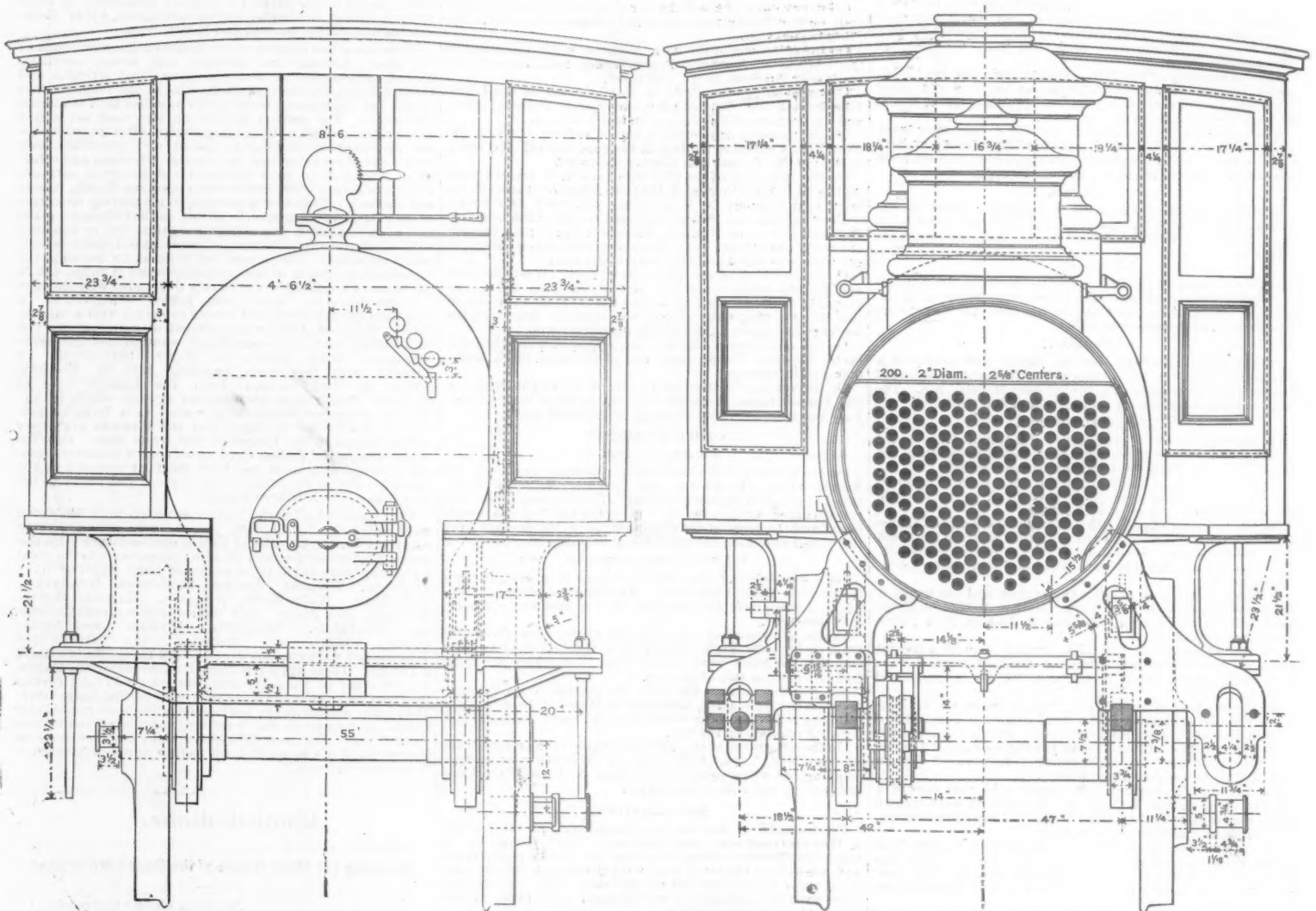
"About \$37 per ton at the mill."

"Can steel rails be manufactured at a profit at that price?"

"Speaking generally, no. There may be one or two mills owning their raw materials—mark that, owning their raw materials—that may make fractional profits at that price."

"How about the laborers employed in steel and iron?"

"Out of the twelve steel mills two have recently had disputes with their men, and the works have been stopped in consequence. Labor is all that the workingman has to



TEN-WHEEL LOCOMOTIVE AT THE CHICAGO EXPOSITION.

Flues.—Lap-welded iron, 200 in number, 2 in. outside diameter, 13 ft. 9 in. long. Set with copper thimbles at fire box ends.

Smoke Stack.—Diamond pattern. Outside sheets made of Otis steel.

Axles, Driving.—Hammered iron. Journals 7½ in. diameter, 8 in. long.

Axles, Engine Truck.—Hammered iron. Journals 4¾ in. diameter, 10 in. long.

Axles, Tender.—Hammered iron. Journals 3¾ in. diameter, 7 in. long.

Wheels, Engine Truck.—28 in. spoke. Made by Davenport, Fairbairn & Co., Erie, Pa.

Wheels, Tender.—30 in. M. C. B. Standard. Made by Davenport, Fairbairn & Co., Erie, Pa.

Crossheads.—Cast steel. Made by Chester Steel Castings Co., Chester, Pa.

Crank Pins.—Made of Otis steel. Main bearing, 4¾ in. diameter, 4¾ in. long; side-rod wrist, 3¾ in. diameter, 3¾ in. long.

Slide Bars.—Hammered iron, case hardened.

Links.—Hammered iron, case hardened, forged solid.

Feed Water.—Two No. 9 Friedman non-lifting injectors.

Steam Gauge.—6½ in. dial. Made by Crosby Steam Gauge & Valve Co., Boston, Mass.

Headlight.—23 in. Made by Post & Co., Cincinnati, Ohio.

Cylinder Packing.—Dunbar's patent.

Safety Valves.—Two, 3 in. Kunkle patent lock-up valves. Made by E. B. Kunkle, Fort Wayne, Ind.

Springs, Driver.—Made by A. French & Co., Pittsburgh, Pa.

Springs, Engine Truck.—Made by A. French & Co., Pittsburgh, Pa.

Springs, Tender.—Made by National Car Spring Co., New York.

Tender.—Eight wheel, forward truck centre-bearing, rear truck centre and side-bearing. Frame of oak, well braced; outside sills bound with iron.

Tank.—Capacity 2,880 gallons water. Top and bottom plates, No. 5, sides, No. 6 iron (made by Reading Iron Co., Reading, Pa.), with angle-iron corners, well braced.

Wheel Base.—Driving wheels, 14 ft. Engine, 25 ft. 3 in. Engine and tender 45 ft. 7 in.

Brakes.—Hand brakes on both tender trucks.

Grate.—Area, 22.58 square feet.

and upon being asked for his opinion of the condition and prospects of the steel and iron trade, he said:

"I think this: I consider that the whole world is taking a rest at present after a period of unusual activity. During this period manufacturers generally increased the capacity of their works greatly. They are now sufficient to supply the whole world, were it as abnormally active as it is the reverse. But as great loss is entailed by curtailment of production, the works are kept running to their full capacity, although prices have fallen to figures which leave even those manufacturers who have unusually favorable facilities little or no profit, and entail a positive loss upon the average manufacturer. It is the same in England as here. One of the largest miners of coal in the world told me last month that he could only figure a profit of four cents per ton upon the coal mined by his firm. In the steel-rail manufacture the same condition of affairs exists, and the great woolen and cotton weaving houses are scarcely in better circumstances."

"Is this depression likely to continue long?"

"In my opinion no revival can take place before next spring. Much as I regret to say it, I believe that matters will grow worse for some months before manufacturing interests can reach a profitable business. A much more decided curtailment of production must take place before there can be any improvement. This will be brought about naturally by the prevalence of such ruinous prices as will compel manufacturers to stop producing goods in advance of the country's needs."

"Are the steel and iron manufacturing firms of this country sound, or do you fear a panic?"

"They are generally sound. While there may be a few failures here and there, nothing like a panic is possible among them."

"Has the change from iron to steel rails, and the consequent economy in the wear and tear of rails, made such a shrinkage in the yearly consumption on the part of old railway lines as to be felt by manufacturers?"

sell, and he cannot be expected to take kindly to reductions of wages, even when such are necessary in order that he may have any work at all. I think the wages paid at the mills on the seaboard of the United States to-day are about as low as men can be expected to take. In the West, notwithstanding a recent agreement of the men to accept a reduction of 30 per cent., it now seems probable, from the very unsatisfactory outlook, that they will have to be asked to work for still less. In our own district of Pittsburgh our rule is to make a bargain in December with our men to govern the coming year. This rule has worked very hardly for our side for the past two years, as the market has been constantly falling. In this way our men have been and are still making much higher wages than any men either to the east or the west of Pittsburgh. But a reduction of wages is inevitable in our district, though we do not apprehend that there will be any trouble about it, as our men are intelligent, and will no doubt deal as fairly with us now as they have in times past."

"What are your views about trades-unions?"

"We have unions in Pittsburgh, and also in all the mills west of us except St. Louis, but no mill east of us will tolerate them. We have always held that in this free country our men have a right to belong to any union they please. And up to the present hour our relations with the trades-unions have been satisfactory. I believe the trades-union is of great benefit to the men, and it has certainly developed many most able men. As a rule, the more intelligent labor is, the less difficult it is to deal with it, if capital only asks for what is fair and just."

"Do you look for any protracted strikes in these interests?"

"No; the situation is much too serious. Unless the market improves, our men will readily see that it is a question of work-at some price or no work at all. They will, therefore, be ready to meet any reasonable demand made by their employers."

What the Public has to Gain by Combinations to Maintain Rates.

In a letter written to the editor of the St. Louis *Globe-Democrat* in reply to an editorial regarding freight diversions, published in that paper, Mr. Albert Fink says:

Please bear in mind that in making diversions of freight from one road to another the companies recognize their duty to give the same facilities and promptness over the road to which the freight has been diverted as would have been given over the road originally selected by the shipper. Therefore, the service performed being the same over each route, and the charges for the service also being the same, there can be no good reason why the shipper should have any preference for one route over another. He might be prejudiced against one road. But a sensible business man does not usually spend money on account of his prejudices; but if he wants to pay more simply to gratify his prejudice he receives value for his money and has no cause for complaint against the railroad companies. As a rule, it may be inferred that, if a shipper insists upon shipping over one particular route when other routes render the same service, he has some substantial reasons for doing so in the shape of lower rates; and the object of diverting freight is to break up this favoritism

criticism, by which a few men are often enabled to monopolize trade and enrich themselves at the expense of the many. The majority of the railroad managers are opposed to and condemn these practices, and are exceedingly anxious to conduct their business in an honorable and business-like manner. For that reason they associate and establish rules for their mutual protection against those who will not carry out their agreements and obligations in good faith. To remove the motive for cheating, and to discover and bring to light the offenders and to put a stop to their objectionable practices, the system of "pooling" and diverting freight has been devised.

The courts, instead of interfering with these practical methods, the adoption of which results so clearly to the best interests of the public, as well as of the railroad companies, without encroaching upon the rights of any one, should sanction and sustain them, and should enforce agreements between the companies as far as they are beneficial to the public, the same as other agreements or contracts are enforced. At present the railroad companies have to battle with these questions as best they can, without the support of the law, and without even the support of public opinion. They are blamed for unjust discriminations, and again, when they associate to stop the evils complained of, they are blamed for combining. This inconsistency arises from the fact that the public is not sufficiently informed to discriminate between combinations which are made for the purpose

The road runs through Brownsville, where it strikes the famous slate quarries at that place. It is laid through a good country for traffic, and as the iron works furnish from 4,000 to 5,000 tons down freight, and nearly as much up in the way of supplies, it is likely to be a paying property. The rails are second-hand, weighing from 45 to 55 pounds per yard, and were bought at the price of old rails. We well remember the time when 6, 8, 12 and 14 mule teams were the only means of conveying the slate from Brownsville or the iron from the Katahdin Iron Works to Bangor. The distance, we believe, was about 40 miles, and it was no uncommon thing in winter to see stacks of pig iron scattered all along the road, where teams on account of the heavy roads, had been obliged to unload and stack a portion of the iron with which they started. A portion of the old road was of the most abominable character, and how wagons or teams stood it is unaccountable. We know of many miles which were laid in corduroy across swamps, and though a pretense of covering the logs with earth had been made, the logs themselves were only too plainly visible. The railroad opens a charming country, and will probably be one of the very best investments of the day for those fortunate enough to possess stock.—*Iron Age*.

Raising a Sunken Locomotive.

The work of raising the sunken locomotive at Bayou Sara has been going on for nearly a week, the contractors being directed by Mr. M. S. Belknap, the Superintendent of the road, who is, as is well known, a thoroughly competent engineer. The method pursued is the sunken-barge plan. Two large barges have been placed over the locomotive, the latter lying in about 20 ft. of water. From these barges four heavy chains pass beneath the machine and are fastened. The barges are then flooded until the water is up to the gunwales. Then, by tightening the chains and by pumping the water from the barges, the engine is lifted from the mud.

This process was in operation yesterday, when one of the chains, 1½ in. in diameter, broke, and the locomotive sank back into the hole it had made for itself in the bottom of the bayou. Another and larger chain has been obtained, and the lifting process will be continued to-day. Mr. Belknap thinks the best plan will be to lift the locomotive clear and then carry it, suspended in the water, to the eastern shore of the river just opposite the city. There it can be raised until a large barge can be floated beneath it. By this process it is believed the machine can be speedily elevated to the surface and so brought to the shops where, under the skillful manipulation of Mr. Adair's great force of machinists, she will soon be put in a condition to resume active duty in the service of the Louisville & Nashville Co.—*Mobile (Ala.) Register*.

A Narrow Escape.

There was a very narrow escape from a terrible accident on the Canal railroad at an early hour Sunday morning. The night freight from New Haven was thundering down the steep grade near Westfield when the engineer saw through the dense fog that the dry bridge over the Pond Hollow road was in flames. The speed of the train and the steepness of the grade left no hope of stopping it, so the throttle valve was thrown open, and the train rushed wildly, but safely, over the burning timbers. One or two of the cars were derailed, but the couplings held, and they were carried across in safety. On investigation it was found that several feet of the ties and stringers of the bridge were almost wholly consumed, and the rails red hot. Had the train passed a little later a fearful accident could not have been avoided, as the bridge is some 50 ft. above the highway, and the timbers would have been burned through and unable to stand the slightest strain. A gang of men worked all Sunday repairing the bridge, and yesterday trains were running over it as usual. The fire was probably caused by sparks from the engine of the northward-bound passenger train Saturday night, and must have been slowly burning for several hours.—*Springfield (Mass.) Republican*, Sept. 25.

Attempts at Train Wrecking.

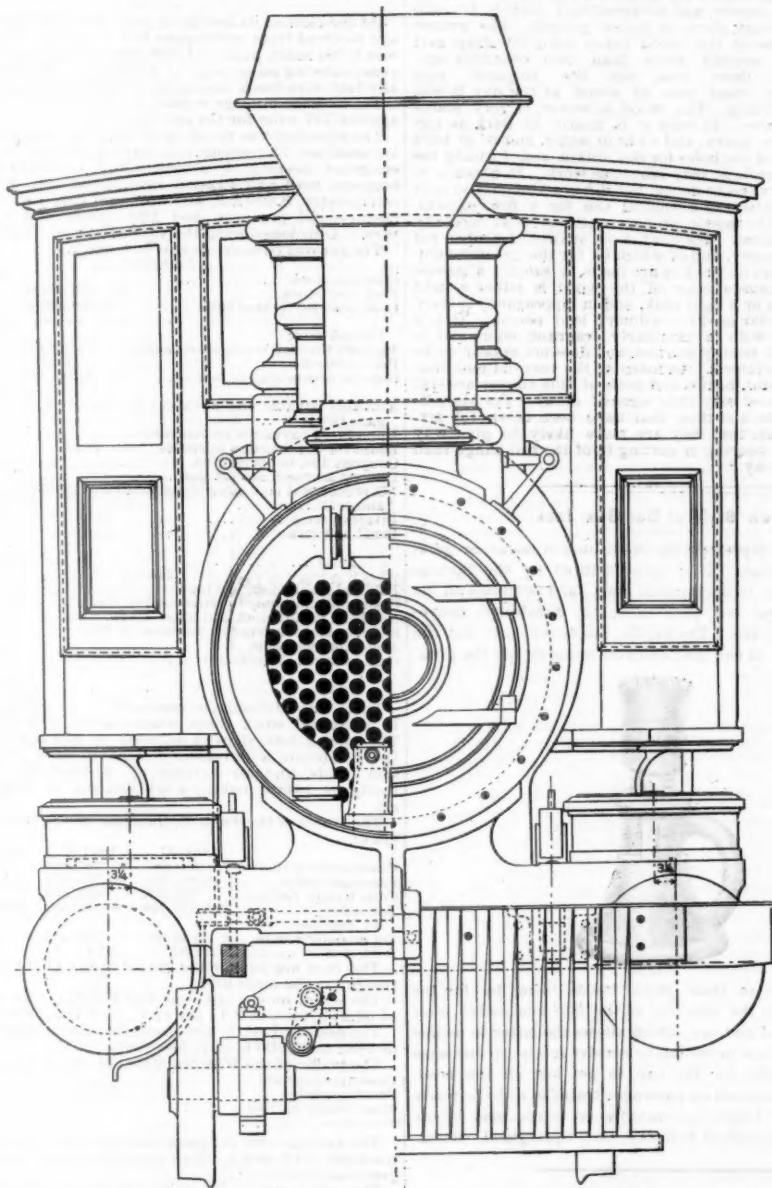
A dispatch from Cowan, Tenn., Sept. 22, says: "An attempt was made yesterday to wreck the accommodation train leaving Nashville at 4.15 a. m. A cross-tie was placed on the track between Estill Springs and Decherd, but owing to the vigilance of the engineer the disaster was averted. The miscreant has not yet been apprehended."

A School for Superintendents.

In a familiar talk, recently, Col. Joseph Hill, Superintendent of the Vandalia, dropped the remark that eight of his boys were now superintendents of railways. The railroad reporter of the *Journal*, catching on to the remark, asked for an explanation. He then went on and gave the names of eight railroad superintendents who commenced under him their railroad life, as follows: J. G. Metcalf, Superintendent of the Louisville & Nashville main line; James Leonard, Superintendent of the Anderson, Lebanon & St. Louis, and also Receiver of the road; D. T. Bacon, Superintendent of the Southern Division of the Toledo, Cincinnati & St. Louis road; J. Riser, Superintendent of the Iowa Division of the Chicago & Northwestern road; George Hurd, Superintendent of the New York & New England road, Eastern Division; W. H. Hartman, Superintendent of the Chicago & Lake Erie; W. G. Sala, Superintendent of the Chicago & Indianapolis Air Line, and George Stevens, Superintendent of several divisions of the Wabash system. Messrs. Sala and Stevens commenced with him as office boys.—*Indianapolis Journal*.

How the "Golden Spike" Was Driven.

When the last rail was dropped the crowd closed in round it, pushing and surging about in the anxiety of each one to be the nearest the "golden spike." President Villard had arranged to have his family witness the triumph of his recent endeavors, Mrs. Villard and the baby, Henry Villard, Jr., who is about three months old, being the only ones of the dignitaries whom the crowd forbore to press upon. The child was held above the heads of the men, and was heartily cheered as the youngest spectator witnessing the completion of the great railroad. There was in fact no spike of gold, either in miniature or full size. Mr. Villard undertook to say something, when the crowd set up a yell for the "golden spike." He then held up an iron spike, whereupon the crowd chafed him, demanding still a sight of the supposititious gold. When the President could be heard, he announced that his company had no golden spike nor any silver hammer. He had, instead, an iron spike—the identical first one that was driven in the construction of the Northern Pacific road. It was driven years ago, when the enterprise was started by H. C. Davis, who was present on this occasion of completing the work, and he desired now to bring the extremities of the undertaking by having Mr. Davis strike the first blow on the last spike. The gentleman, who, beginning as the foreman of a track-gang as long ago as the first rail was laid, is now Assistant Passenger Agent in the general office at St. Paul, took the ceremonial hammer, and with a blow set the historical spike in the sleeper. Blows were then delivered out by unprofessional track-layers, in the following order: Presi-



TEN-WHEEL LOCOMOTIVE AT THE CHICAGO EXPOSITION.

and unjust discrimination and to have all shippers pay the same rate for the same services.

Also please bear in mind that there are no restrictions imposed by the so-called "pool" agreements upon any railroad company to prevent it from making as low rates as it thinks best. The restrictions imposed are simply that these reductions shall not be made secretly; if made, they shall be made alike to all shippers. Let the railroad company openly give notice of the reduction, and then no one has a right to object, as all competing roads can adopt the same rates if they choose. The making of low rates secretly to one or a few shippers, while others pay higher rates, is not only unjust in itself, but is unlawful, and it is proposed by diverting freight to put a stop to these injurious and unlawful practices.

You inquire whether it is necessary that these diversions of freight should be made as the only means that the railroads have been able to devise to maintain the established tariff rate. "If this is so," you ask, "and pledges are made by railroad agents only to be broken, what shall be said about honor in the service? And why cannot agreements to maintain rates be enforced by the courts?" The answer is, that not much can be thought of the honor of any railroad manager who enters into an agreement to maintain certain tariff rates with his competitors, and who then goes to work and secretly makes reductions in rates for the purpose of deceiving and taking advantage of his more honest competitors. It is, however, a lamentable fact that there are yet men in charge of these great properties mean enough to do this, or allow it to be done. It is this class of men that cause most of the trouble that is experienced by the railroad companies in endeavoring to secure just remuneration for their services, and to avoid unjust discrimination and fav-

or of conducting the transportation business in a proper and lawful manner and combinations that are made for the purpose of extortion, the preconceived idea being that all combinations between railroad companies are for the latter purpose. The fact is that the usefulness of railroads to the public can only be fully developed by combinations between the different railroad companies.

Perhaps the discussion which has taken place since the injunction was taken out by the Continental Sugar Refinery of Boston to prevent certain Chicago railroads from diverting freight may lead to a better understanding of the principles involved and the practical benefits to be derived by the methods adopted by the associated railroad companies for the purpose of securing the shippers uniform rates of transportation and to put a stop to unjust discrimination.

THE SCRAP HEAP.

A Light Standard Gauge Road.

The state of Maine has a 20-mile standard gauge length of railroad, which apparently has all the advantages ever claimed by the narrow-gauge people, with the additional one of being standard gauge, having roomy cars and being capable at any time of transformation into a road of standard weight. The road leaves Milo, on the Bangor & Piscataquis Railroad, and runs to the Katahdin Iron Works, a distance of 20 miles. There are four bridges on the road, having spans of 160 and 150 ft., and two of 50 ft. each. The road is fairly ballasted with good gravel. There are 2 engines, 2 passenger cars, 1 baggage car, a snow plow, 10 box and 20 flat cars. There are good depots, two turn-tables, water tanks, wood sheds, repair shops, and the whole cost of the road was only \$200,000. There are only ten stockholders.

Total	\$7,855,450	\$5,470,305	I.	\$2,425,154	44 6/10
Expenses	5,336,930	3,572,940	I.	1,764,000	49 4/10
Net earnings	\$2,518,520	\$1,867,465	I.	\$668,064	35 4/10
Gross earn. per mile ..	5,248	6,819	D.	1,071	32 4/10
Net	1,982	6,819	D.	1,071	32 4/10
Per cent. of exps	67.93	63.10	I.	2.13	
Expenses include taxes and rentals, which amount to \$388,863 last year, against \$915,111 the previous year.					

The average mileage worked in 1882-83 was 1,497 miles; in 1881-82, the average was 797 miles.

The earnings from construction business, that is from construction material and passengers carried for the company and contractors, amounted to \$1,523,112 during the year. This sum is included in the earnings above. As this traffic is charged only at cost, in order to estimate the actual earnings of the road from commercial business, the sum given above should be deducted both from earnings and expenses, which gives the following result for the year:

Gross earnings (\$4.230 per mile).....	\$3,332,347
Expenses (60.23 per cent.).....	3,813,818
Net earnings (\$1.682 per mile).....	\$2,518,529

This leaves the net earnings, as reported, unchanged.

The report says: "On the Eastern divisions the total passenger movement increased from 19,466 in 1881-82 to 32,849 in 1882-83, a gain from 278,214 to 418,498, a gain of 87.51 per cent. The number of passengers carried eastward 198,475, and westward, 252,512, the difference representing largely though not entirely, the immigration into Northern Minnesota, North Dakota and Montana. The increase in the passenger earnings of these divisions was 42.6 per cent. The increase of east-bound freight tonnage on the Eastern division was 51.51 per cent, and of the west-bound tonnage, 9.81 per cent, the total increase being 20.61 per cent. The increase of freight earnings on these divisions was \$869,393.92. On the Western divisions both passenger and freight business show a steady and important growth. On the Pacific Divisions, including the Cascade Branch, the gross earnings rose from \$272,676 in 1881-82 to \$420,871 in 1882-83, a gain of \$148,194, or 35.2 per cent. At the same time there was a decrease in the operating expenses of \$23,645, or 8 per cent."

"While the earnings per mile of the older portions of the road show a satisfactory increase, the ratio of earnings to total mileage was necessarily less for the fiscal year just closed than the preceding year, from the fact that of the 700 additional miles of road operated, nearly 600 were newly constructed line, traversing regions where the road had to create settlement and business as it advanced. The earning capacity of this large mileage will soon be demonstrated, now that a connection of our tracks has been effected and our line opened for through traffic to and from the Pacific coast. All portions of this new mileage, it should further be borne in mind, run through a country abounding in natural resources and certain to develop a steadily increasing local business. On the whole, the above exhibit must be held to be gratifying for a company pushing its tracks from the two sides of the continent, through regions recently peopled or entirely unsettled, to a connection in the Rocky Mountains, and dependent for its earnings, until that connection was made, wholly upon its local traffic. This exhibit is an encouraging indication for the future. It serves as a guide to a just estimate of the income we may expect with the completion of our line as a direct route to the Pacific coast, and with the fuller development of the immense regions to which the Northern Pacific furnishes the only means of rail communication."

The general income and revenue account, as given in the Treasurer's statement as follows:

Balance, July 1, 1882.....	\$3,039,923.49
Earnings of road.....	7,855,450.26
Land Department.....	1,511,316.14
Miscellaneous.....	12,249.06
Proceeds of bonds sold.....	18,500,000.00
" preferred stock sold.....	757,159.86
Loans for construction purposes.....	3,452,081.76
Total.....	\$37,128,109.51
Working expenses.....	\$4,953,066.82
Rentals and taxes.....	388,862.94
Interest.....	1,209,837.54
Interest on dividend scrap.....	139,224.63
Preferred stock and bonds canceled.....	253,968.30
Land Dept. expenses and surplus for retiring bonds.....	1,257,347.84
New construction.....	16,370,965.81
New equipment.....	1,804,916.37
Improvement of old road.....	2,013,966.61
Material.....	247,281.16
Interest.....	604,918.76
Advances repaid.....	4,593,946.02
Total.....	33,633,242.80
Balance, July 1, 1883.....	\$3,494,866.71

Of this balance the sum of \$2,275,651.96 is cash reserved to meet interest uncalled for and accruing, and the balance of \$1,219,304.75 is cash in the hands of the Treasurer and other disbursing officers.

This income account may be summed up as follows:

Receipts for operation of road.....	\$7,855,450.26
" land and miscellaneous accounts.....	1,523,245.14
" on capital accounts.....	24,769,251.62
Total.....	\$34,088,276.02
Expenses and interest on old road.....	\$6,685,991.93
Land expenses, inc. stock and bonds canceled.....	1,511,316.14
Spent on improving old road.....	2,013,966.61
New construction and equipment.....	23,421,968.12
Total.....	33,633,242.80
Balance, increase of cash on hand.....	\$455,033.22

The report states that the largest item in the improvements of old road has been for replacing with steel the iron rails first laid. The mileage of track relaid with steel during the year was 206 1/2 miles.

The new equipment purchased during the year included 131 locomotives, 71 passenger cars and 2,395 freight cars. In addition to this 89 locomotives, 107 passenger-train cars and 2,289 freight cars are under contract and will be delivered during the current year.

LAND DEPARTMENT.

The operations of the Land Department for the year were extensive, the sales being as follows:

	Acres.	Amount.
Minn. & Dakota Div.....	417,388	\$1,740,518
Missouri Div.....	110,033	324,421
Yellowstone Div.....	6,508	24,625
Montana District.....	33,940	144,488
Pend d'Oreille Div.....	169,361	753,614
Pacific Division.....	26,046	154,195
Total.....	761,236	\$3,061,861
Town lots, all divisions.....		380,971

Total amount of sales..... \$3,392,832

The total amount of sales in 1881-82 was \$1,476,256. The report says: "It is worthy of note that not only has there been a large increase in the number of acres sold during the past fiscal year over the sales of 1882, but also that the average price per acre obtained for lands sold has been materially advanced. The increase in price is especially noticeable in sales made in Montana and Washington territories, where the advance has been largely secured by a judicious system of appraisement, in lieu of the uniform price in use in previous years."

"This increase in average price per acre is, in the Eastern District (Minnesota & Dakota, Missouri and Yellowstone divisions), \$0.19; in the Montana District, \$1.65; in the

Western District (Pend d'Oreille and Pacific divisions), \$1.82; average over all divisions, \$0.76.

"The total number of separate purchases made for the past fiscal year was 2,417, as against 1,350 in 1882."

"The average number of acres sold to each purchaser was 314.95 acres, and the purchases have chiefly been made by actual settlers for immediate improvement."

"There has been active demand for town property at good prices. Sales of town lots during the fiscal year were \$330,971. Of these sales at Livingston were \$173,845; at Bismarck, \$57,877; at Townsend \$20,800."

"The development of the extensive regions tributary to our road has gone on rapidly, and the result of the year's growth are in all respects gratifying. They fully justify the position taken by the company in its reports and publications that these regions offer the most inviting field to immigration now to be found within the borders of the United States. An official statement recently given to the press by the General Land Office at Washington shows that in the ten new states and territories where the largest transfers of government land are made there was, during the year ending June 30, 1883, an increase over the previous year of 35,219 in the number of entries (cash sales, original homestead entries, and timber culture entries), and 3,505,843 in the number of acres entered. The amount received from cash sales increased from \$3,313,834 in 1882 to \$7,564,449 in 1883. In Dakota the number of homestead entries increased from 14,156, covering 2,207,268 acres, to 23,491, covering 3,267,227 acres. The number of timber culture entries ran up from 9,368, covering 1,456,532 acres, to 11,566, covering 1,765,259 acres, and the cash sales increased from 673,388 acres for \$977,242, to 1,518,091 acres, for \$2,109,397. Thus it appears that of the year's increase of 3,505,843 in the number of acres of public land taken up, 2,203,489 must be credited to the territory of Dakota alone. In Washington Territory, also, there was a remarkable increase. The cash sales increased from 71,244 acres for \$102,345, to 252,086 acres for \$571,446; the original homestead entries from 231,132 acres to 386,778 acres, and the timber culture entries from 87,524 acres to 143,412 acres."

"In Montana the entries aggregated 407,008 acres against 197,475 for the previous year. Of the government lands entered during the past twelve months in Minnesota, Dakota, Montana and Washington, 20,983 entries, representing 2,905,000 acres, have been made within the limits of the Northern Pacific land grant. It would be fair to estimate that these entries represent 16,000 heads of families who have made settlements in the even numbered sections adjacent to the company's land during the year."

FINANCIAL STATEMENTS.

The report says: "At the close of the fiscal year ending June 30, 1882, the syndicate had taken \$20,000,000 of the general mortgage bonds, having further options for \$10,000,000 in 1882 and \$10,000,000 in 1883, which, when taken, would complete the contract. The \$10,000,000 for 1882 were provided for by acceptance of new road during that year, and were promptly taken by the syndicate. In the spring of 1883 the syndicate had disposed of \$31,000,000, and offered for sale the remaining \$9,000,000, which were all subscribed for, and on June 30 the entire option for 1883 was declared. It was not in the power of the company, however, at that time to deliver all the bonds called for, in consequence of a sufficient mileage of new road not having been accepted; delivery, therefore, was made only of such an amount of bonds as could properly be issued under the provisions of the mortgage, and the money for the remaining bonds has been credited to advances on general mortgage bonds. Of the proceeds of these bonds \$4,593,946.02 was paid June 30, 1883, to the Oregon & Transcontinental Co. on account of the indebtedness to it for loans and advances."

"The excess of expenditures on account of construction and equipment (\$7,866,507.92) over the cash receipts from the proceeds of the \$40,000,000 general mortgage bonds, sales of preferred stock and other sources of income, arises from several causes. In the first place, the cost of construction exceeded the engineer's estimates. The work was to be done in remote regions, the natural conditions of which, such as climate, seasons, character of soil and streams, and geological formation, were so many unknown factors entering into the construction problem. Thus to mention some instances illustrating this—the cost of the road bed along the Yellowstone and the Clark's Fork of the Columbia was very much increased by the waters of those rivers washing out and undermining the banks; and the tunnels through the Belt Mountains and the main range of the Rocky Mountains cost nearly 50 per cent. more than the original estimates, simply because, instead of solid rock, as was expected, loose material was encountered. Next, the construction account embraces the outlay required not only for building the road itself in a first-class manner, but also such extraordinary works as the three great bridges over the Missouri, the Snake and the Willamette rivers (the first of which is completed, and the last two are being constructed), the extensive central shops and other buildings at Brainerd, and the several division shops, all of which latter have been constructed in the most substantial and approved manner, and on the scale sufficient to meet the wants of the company for many years to come. Then, again, the increase of traffic on the main line, together with the construction of branch lines and the traffic derived therefrom, has required an increase in the necessary motive power and rolling-stock far exceeding the original estimates."

"The issue of bonds to provide for the construction and equipment of the road is, by the terms of the mortgage, restricted to \$25,000 of bonds per mile of road actually completed and accepted by the President of the United States. This restriction was made in consequence of a provision of the plan of reorganization made and adopted in June, 1875, when, as to a great part of the work to be accomplished, only a general comprehension of its magnitude was possible, and the stupendous difficulties in its way could not have been fully realized. The plan of reorganization was a compromise of conflicting interests and opinions, and, in its wise and politic provisions, it reflects credit upon its framers. But the means it proposed and provided for, wherever to complete and equip the road, are, confessedly, inadequate, and this for reasons which, as before shown, were then impossible to be foreseen."

"To avoid, therefore, the embarrassments of large floating liabilities, arising from causes such as are above mentioned, an arrangement was entered into with the Oregon & Transcontinental Co. under which that company was to make advances of the money needed, and to accept therefor such negotiable security as this company is competent to give, the terms and form whereof are to be decided upon hereafter."

"The volume of the preferred stock is being continually and steadily reduced through the sales of lands in Minnesota and Dakota, east of the Missouri River. At the end of the fiscal year (June 30, 1883) there had been canceled and extinguished \$9,250,536.10 of the original \$51,000,000, leaving then existing \$41,749,463.90 preferred stock, including fractional scrip."

"In view of the necessity of using all the available resources of the company for construction and equipment purposes, your board deemed it unwise to declare cash dividends

before the main line should be completed, so as to furnish a through line for transcontinental traffic. That great result now being accomplished, the time appears to be at hand for a stricter recognition and satisfaction of the claims of the preferred stock under the plan of reorganization; and, with the certainty of increasing earnings, keeping pace with the growth of the tributary country, and the prospect of low operating expenses, by reason of the discovery and development of the coal fields of Central Montana and Western Washington territories, your board feel warranted in expressing their belief that the payment of regular dividends on the preferred stock may be reasonably expected to begin at an early date."

NEW CONSTRUCTION.

The report says: "The work of construction on the main line and branches has made satisfactory progress since the last annual report."

"Wisconsin Division.—During the early part of the fiscal year the work on the first 25 miles of this division, from Northern Pacific Junction to Superior, was completed. Surveys were made last spring for the extension of the division as far as Ashland, 60 miles from Superior, and a contract was made for the clearing, grading and bridging. Thirty miles of road-bed will be completed, and the track laid before the close of the present working season, and the remaining 30 miles will be finished early in 1884."

"The Great Tunnel.—The total length of the Bozeman Tunnel is 3,612 ft. Of this distance there had been excavated June 30, 1883, from the east end 1,266 ft. and from the west end 641 ft., making a total of 1,907 ft., and leaving 1,705 ft. yet to be opened at that date. It is expected that this tunnel will be completed by Jan. 1, 1884. The Iron Ridge Tunnel, 13 miles west of Helena, having a total length of 533 ft., was completed in April last. Up to Feb. 1, it was expected that the Mullan Tunnel would be completed in time to lay the track through in June; but the work was delayed by the falling of masses of rock, and the necessity for protecting the sides and roof with heavy timbers, so that no progress was made at the eastern end for two months. The length of the tunnel is 3,850 ft. On June 30, 1883, there had been completed at the east end 2,077 ft., and at the west end 1,465 ft. of heading and 888 ft. of bottom, making the total heading 3,542 ft. and of bottom 2,965 ft., and leaving to be completed 308 ft. of heading and 885 ft. of bottom. The headings met on Aug. 17. If no new and unforeseen difficulties arise, this tunnel will be completed in October."

"Portland Division.—This division extends from the west bank of the Willamette River in Portland, to the south bank of the Columbia River at Coffin Rock, opposite a point two miles below Kalama, a distance of 42 miles. The grading and bridging on this division are well advanced, and it is expected that the track will be laid early in the autumn, and the ferryboat be in use in the spring of 1884. (The track is now all laid.)"

"Little Falls & Dakota.—At the beginning of the fiscal year 55 miles of track had been laid. During the year the line to Morris, 87 1/2 miles, was completed and put in operation."

"Northern Pacific, Fergus & Black Hills.—Track-laying was resumed at Fergus Falls in August, 1882, and has now reached a point 40 miles west of Breckinridge. Total amount of track laid during the fiscal year, 65 miles. About 2 1/2 miles of additional grading is ready for the rails, and the track will soon be put down, thus reaching the terminus at Milnor, 117 miles from Wadena."

"Fargo & Southwestern.—This branch starts at Fargo and runs in a southwesterly direction to La Moure, on the James River, a distance of 87 1/2 miles. Track-laying began July, 1882, and was completed to Lisbon, 55 miles, in December. During the present season the track reached the terminus, La Moure."

"Jamestown & Northern.—This branch leaves the main line one mile west of Jamestown, and runs in a northerly direction 95 miles to the west end of Devil's Lake. Considerable grading was done during the fiscal year 1881-82. Track-laying began in August last, and had progressed as far as Carrington, 42 miles, at the beginning of the winter. The grading is nearly completed to the lake, and the track will soon be laid. A survey has been made for an extension of the line to the Dominion Boundary."

"National Park Branch.—This line was located in October last, leaving the main line at Livingston and running up the Yellowstone River to the northern boundary of the National Park, a distance of 51 miles. The work was commenced last spring, and was completed in August."

"Palouse Branch.—Track was laid, prior to the end of the fiscal year, from Palouse Junction eastward a distance of 32 miles. Track-laying has since progressed a further distance of 60 miles. The road will soon be opened for traffic as far as Colfax, and will be completed in 1884."

"Seattle Branch.—The track has been laid to a point about 25 miles from Tacoma and 15 from the junction with the Cascade Branch. Grading is well advanced on the remainder of the line, and it is expected that the track will all be down before the winter season begins."

"At the beginning of the fiscal year, July 1, 1882, the ends of the track on the main line were 564 miles apart. They were advanced during the year:

From the East.....	Miles.
From the West.....	293 1/2
Total.....	100 1/2

Leaving June 30, 1883, 114 miles to be completed. This has since been completed and the gap closed.

Total track laid on main line.....	Miles.
Total track laid on branch line.....	450
Grand total for fiscal year.....	757

"Since the close of the fiscal year, and up to Sept. 15, 294 miles of additional track have been laid on the main line and branches, making 1,041 miles for the period beginning July 1, 1882, and ending Sept. 15, 1883."

TERMINAL CONSTRUCTION.

"A company called the Northern Pacific Terminal Co. of Oregon has been formed. Its capital stock is \$3,000,000, held in the following proportions: Northern Pacific 40 per cent.; Oregon Railway & Navigation Co., 40 per cent.; Oregon & California, 20 per cent."

"A total issue of \$5,000,000 6 per cent. gold bonds by the Terminal Co. was authorized to provide the means to purchase terminal grounds and to erect the requisite improvements thereon. Of these bonds \$3,000,000 have been sold at par, and the proceeds devoted to the requirement of valuable real estate, both in the city of Portland, on the left bank of the Willamette, and in East Portland, on the opposite bank. The property in Portland proper comprises some 60 acres, adjoining the business portion of the city, with the use of 2,200 ft. of dock facilities on the river bank."

"Arrangement for an independent line to St. Paul and for the necessary terminal facilities in that city and Minneapolis, have been made by the reorganization of the St. Paul & Northern Pacific Co., and a lease of that company's property to the Northern Pacific. The terminal facilities will be paid for by the issue of St. Paul & Northern Pacific warrant bonds, as has been heretofore noted."



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S. WRIGHT DUNNING AND M. N. FORNEY.

EDITORIAL ANNOUNCEMENTS.

Passes.—All persons connected with this paper are forbidden to ask for passes under any circumstances, and we will be thankful to have any act of the kind reported to this office.

Addresses.—Business letters should be addressed and drafts made payable to THE RAILROAD GAZETTE. Communications for the attention of the Editors should be addressed EDITOR RAILROAD GAZETTE.

Contributions.—Subscribers and others will materially assist us in making our news accurate and complete if they will send us early information of events which take place under their observation, such as changes in railroad officers, organizations and changes of companies, the letting, progress and completion of contracts for new works or important improvements of old ones, experiments in the construction of roads and machinery and in their management, particulars as to the business of railroads, and suggestions as to its improvement. Discussions of subjects pertaining to ALL DEPARTMENTS of railroad business by men practically acquainted with them are especially desired. Officers will oblige us by forwarding early copies of notices of meetings, elections appointments, and especially annual reports, some notice of all of which will be published.

Advertisements.—We wish it distinctly understood that we will entertain no proposition to publish anything in this journal for pay, EXCEPT IN THE ADVERTISING COLUMNS. We give in our editorial columns OUR OWN opinions, and those only, and in our news columns present only such matter as we consider interesting and important to our readers. Those who wish to recommend their inventions, machinery, supplies, financial schemes, etc., to our readers can do so fully in our advertising columns, but it is useless to ask us to recommend them editorially, either for money or in consideration of advertising patronage.

THE NORTHERN PACIFIC REPORT.

Closely following the opening of the Northern Pacific Railroad across the continent comes the report of the company for the year ending with June last—a document which excites unusual attention, not only because of the interest in the recent opening of the road, but also and chiefly because of the activity of the shares of the company on the exchanges. For, unlike most roads while under construction, there has been for two years a great deal of speculation in Northern Pacific stock, and on the New York Exchange at times it has led the list.

Perhaps there has been some advantage in this to the company. It was borrowing money to complete its road. It helped its credit greatly that its shares had a large marketable value. Bonds with a property behind them selling in the market at the rate of \$68,000,000, which is what the Northern Pacific common and preferred stock amounted to at the prices at which the shares were sold in New York by tens of thousands just a year ago, made the bonds, amounting to about \$40,000,000, seem very strongly secured, and they commanded and command good prices. They were negotiated without difficulty, and doubtless on much better terms than if there had been no market or only nominal prices for the stock. But, of course, those who have bought these shares so freely are now anxious to know what property and what prospects of future profits they represent.

President Villard's report is very full of information, including many subjects which are of prime importance in considering the prospects of a new enterprise in a new and largely unknown country, which would be unnecessary in the report of an established railroad. A concise statement of the actual property and of the financial position of the company, and its probable immediate requirements, we miss, however (as in most reports).

What then is the property and what the probable charges against net earnings of the Northern Pacific Railroad Company?

It owns a railroad from Superior, Wis., across the continent to the point where Clark's Fork and the Snake River unite to form the Columbia, 1,682½ miles, a half interest in the 24 miles which gives it an entrance into Duluth, and what is now an isolated line across the territory of Washington from the Columbia

River north to Puget Sound, 105 miles, which is at right angles with the main line, and will properly be considered as a branch even after the completion of the road connecting it with the main line. There are 511 miles of other branches worked by the Northern Pacific, but they are not yet owned by it nor covered by its stock and bonds, but it pays rental for them to the Oregon & Transcontinental Co. It also leases the line from Brainerd to St. Paul; and work is far advanced on 124 miles of other extensions and branches of the Northern Pacific, all of which are the property of the Transcontinental. The 214 miles of road along the Columbia River by which the Northern Pacific reaches Portland are owned and worked by the Oregon Railway & Navigation Co., which receives the earnings and is alone responsible for the liabilities of this part of the line. Thus the Northern Pacific road, covered by its capital, is 1,800 miles long. Most of the branch lines which it leases are likely in time to have quite as heavy a traffic as the average of the main line, as they are nearly all in the most fertile country in Minnesota, Dakota and Eastern Washington, and they will all become its property by the operation of a sinking fund.

The equipment June 30 (which, doubtless, was all that was then paid for), with which not only the 1,812 miles of road above, but 637 miles of leased road are worked, consisted of 289 locomotives, 167 passenger-train cars, 7,400 freight cars, and 107 service cars—that is, cars used only in the service of the road and not to carry paying traffic. This gives a locomotive for every 6.3 miles of road, and one passenger-train car for 10.9 miles, and 4.06 freight cars per mile of road. There were under contract 89 more locomotives and 2,396 more cars, the payment for which will, of course, increase the capital account as it stood June 30. This is a light equipment. There is no separate charge for equipment on the balance sheet, but the additions this year are charged in the income account at \$1,604,916. At the very lowest prices, however, the 181 locomotives and 2,466 cars shown in the list as added during the year would have cost more than \$2,500,000, so that the additions in the list are probably not all the same as those charged to new equipment in the income account. Estimating the value of locomotives at \$9,000, of passenger-train cars at \$5,000, and of freight train cars at \$600 each (liberal prices), the equipment June 30 may have cost about \$3,000,000, or \$4,445 per mile of road owned.

Now this property is nominally represented by \$39,631,000 of general mortgage and \$5,890,000 of other bonds, \$49,000,000 of common and \$41,749,464 of preferred stock. The report says, however, that construction cost nearly \$8,000,000 (\$7,986,505) more than the amount provided by the sales of stocks and bonds, which was a floating debt. There was besides scrip outstanding for the dividend of 11.1 per cent. declared last year, amounting to \$4,640,821.

There is thus \$12,627,329 of debt on which interest must be paid, besides the bonds outstanding. The report does not leave it clear whether the \$8,000,000 excess of cost of road was what had accrued at the end of the fiscal year, or the amount after the road was completed. If the former, since there were no more bonds to be issued, there must have been a considerable addition to it since June; and in either case there must be some addition to it hereafter, as there is a considerable amount of construction work still to be done. We have at all events \$52,148,000 of obligations on which interest must be paid before there can be dividends, requiring, we will say, \$3,130,000 per year.

Further, the proceeds of the stock and bonds not being sufficient to complete the road, resort was had to other means to secure the requisite terminal property at both ends of the road. The St. Paul & Northern Pacific, owning the line (not yet completed) from Brainerd to St. Paul, and the great and costly terminal grounds between St. Paul and Minneapolis, is authorized to issue \$10,000,000 of bonds and has already sold \$5,000,000 of them. Its property is leased to the Northern Pacific, without equipment, for 40 per cent. of the gross earnings, but not less than the interest on the bonds. Thus in all estimates of the profits of the line from St. Paul to the Pacific, the interest on the bonds of this company must be regarded as part of the fixed charges on the Northern Pacific. The interest on the amount now issued will be \$800,000 per year.

At Portland the "Northern Pacific Terminal Co." will provide the grounds, docks, warehouses, stations, etc.; but here two other companies participate. The Oregon Railway & Navigation Co. owns 40 per cent., the Oregon & California 20 per cent. of the stock, and the Northern Pacific 40 per cent. This company has issued \$3,000,000 of \$5,000,000 bonds authorized, for the purchase of land. The three lessee companies pay the interest on the bonds as rental, and

if their payments are to be in proportion to their holdings of the stock, the Northern Pacific's share for the bonds already issued will be \$72,000. We have then what appears to be minimum rentals amounting to \$372,000 for these two terminal properties, which form a part of the fixed charges of the Northern Pacific Railroad, in addition to the interest on its own bonds.

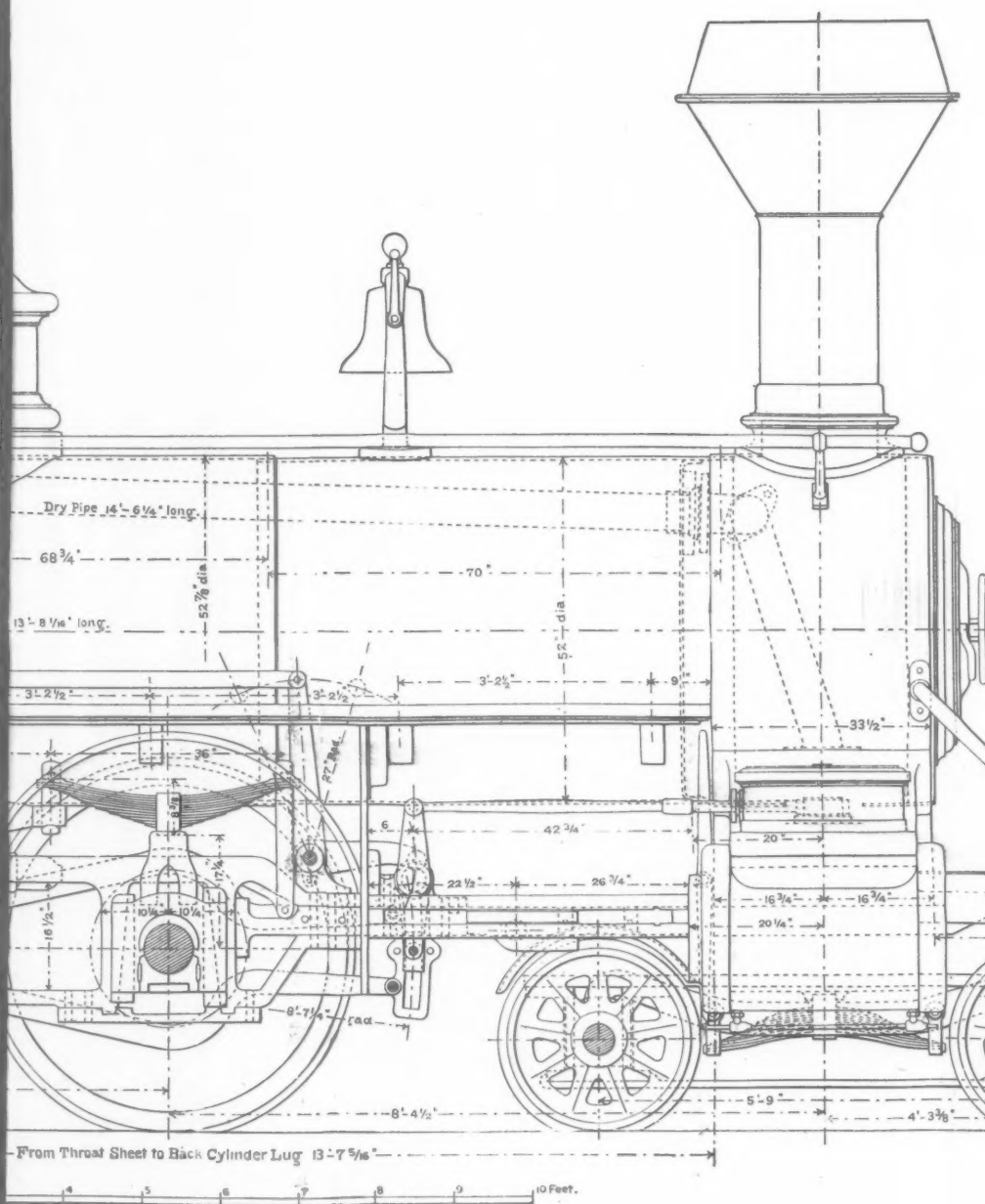
On the 511 miles of branches leased from the Transcontinental Company, which will very soon be 630 miles, the Northern Pacific is to pay a minimum rental of \$1,200 per mile a year and a sinking fund of \$200, but it will not be liable for this amount until two years after the completion of the roads leased. Probably for that time it will pay over the whole net earnings if they are less than \$1,400 per year: the statements of the terms of the lease do not make this plain. Only a very small part of these branches is two years old. If our interpretation of the terms of the lease is correct, these lines cannot at present be a burden on the Northern Pacific, but will probably not add anything directly to its income: that is, the fixed charges of the Northern Pacific proper cannot be increased by deficits of the Transcontinental branches until these have been open two years. When they have been open two years they will require a rental of about \$750,000 per year and a further yearly payment of about \$125,000, which, however, will be properly chargeable to capital, as through it the Northern Pacific will become the owner of the property.

We then find minimum charges of \$3,502,000 which must be paid from the net earnings of the Northern Pacific's 1,800 miles of road owned and the 152 of the leased St. Paul & Northern Pacific, which is at the rate of \$1,800 per mile of road, very nearly. Whatever further expenditures may be made for the Northern Pacific on the two terminal properties will require an addition to these charges. About 90 miles of the St. Paul & Northern Pacific remain to be constructed, so that the larger part of this fiscal year, doubtless, rental will still be paid to the St. Paul, Minneapolis & Manitoba for the use of its road to St. Paul.

Since laboriously calculating this financial position of the company, we have seen its own statement, which differs from ours by making no allowance for the interest on the terminal companies' bonds, which it is perhaps intended to include in working expenses, which, "with rentals and taxes," are estimated to be 80 per cent. of the gross earnings, which are estimated at 15 millions. This statement gives the mileage of branches as 446, which was the mileage completed at the close of the last fiscal year (June 30); but since that time down to Sept. 15 President Villard says that 170 miles more have been completed, making 616 miles, while about 125 miles of extensions are soon to be completed. The statement says that arrangements for funding the \$8,000,000 have been made, and it gives the interest on it as 6 per cent., the same as on the other debt.

Now for the last fiscal year the company reports \$7,855,459 of gross and \$2,761,293 of net earnings from an average of 1,497 miles of road. The earnings of the road built in the last fiscal year, however, of course are no criterion of what they will be now that the road is opened through, as a very large part of it had very little value until the road was completed. But \$6,267,490 of the gross earnings were on the eastern divisions of the road, all but 300 miles of which was open at the beginning of the year, while about 600 miles of it have been in operation for many years. The 105 miles of the Pacific Division have also been in operation about ten years and the 34 miles of the line to Carbonado, connecting with it, have been several years in operation. The 139 miles of road there earned about \$3,000 per mile gross last year. The 231 miles of the Pend d'Oreille Division, all of which was open all last year, and more than half of it the year before, earned at the rate of \$3,536 gross and \$1,168 net per mile; its traffic must have been very largely construction material and supplies for the working force, as there is scarcely any population on the northern third of this division, which, however, may supply in lumber and timber more traffic than some better peopled portions of the line.

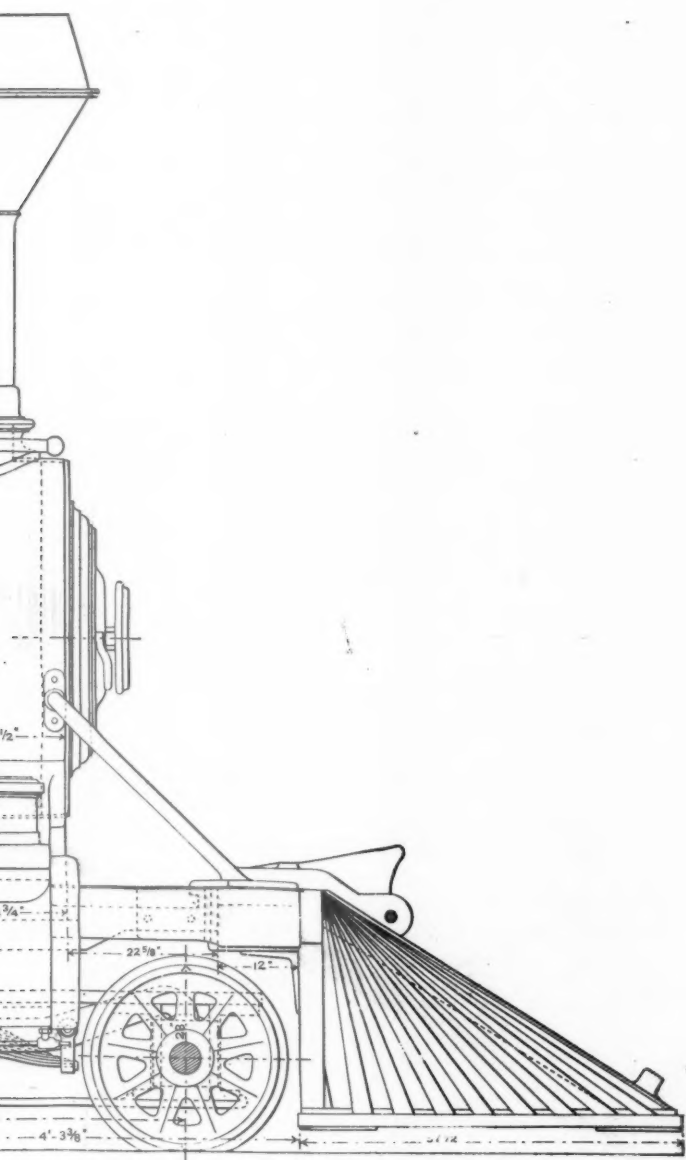
There has been a great growth of population on this road east of Missouri—great in amount, and not simply in percentage. More and more land is brought under cultivation yearly, and this growth is sure to continue; it may not be at as rapid a rate as heretofore, as the choicest lands have now been occupied, and there is not the same eagerness to take what is inferior or at a greater distance from transportation. But it is proper to count on a great growth of traffic here immediately, as this year's immigrants will grow their first crops next year, and the settlers of the past two or three years will nearly all add something to the acreage they cultivate.



D LOCOMOTIVE

EXPOSITION OF RAILWAY APPLIANCES.

MOTIVE WORKS, Dunkirk, N. Y.



West of the Missouri to the mountains the growth has been rapid, but it is not very great in amount, or rather in amount per mile. The effect of the railroad in stimulating it cannot easily be estimated beforehand.

There are some mines and some valuable forests along the long stretch of road, some 400 miles, over the mountains, and some fertile land and more good for grazing, but this will probably be a not very productive section of the road.

The report indicates that there is less productive wheat land on the Pend d'Oreille Division than we had supposed. From all stations on this division the shipments of grain last year were but 541 tons, equivalent to 18,033 bushels of wheat, two-thirds of which were from one station (Cheney). Not far south of this division is the great wheat country penetrated by the Oregon Navigation Company's lines; and it is to reach it, doubtless, that the Palouse Branch of the Northern Pacific has been built. Though none of this division is much more than two years old, if there were much land on it as productive as that in the vicinity of Walla Walla, it would have been almost sure to ship more than ten times the grain shipments of the division last year.

Besides what growth there may be in the local traffic, must be added the entire amount of through traffic, which the road began to carry this month. We do not think that this can be very large in amount, but it will be profitable. Should it be that proportion of the total Pacific traffic that the population of Oregon and Washington bears to the whole Pacific coast population it will be about one-fourth of it. The Union Pacific, through its Oregon Short Line, will have a share of the Oregon traffic; and though the Northern Pacific, through steamer connections, may have some California traffic, it is not easy to see why it should have more than the Central Pacific can get in the same way from Oregon.

But against all additions to earnings must be offset a great decrease in receipts for construction freight and travel, which last year amounted to no less than \$1,523,113, or nearly one-fifth of the total earnings. It is said that this was charged at cost; but though the charges may have been no more than the average cost of such service, it is not probable that the working expenses would have been reduced \$1,500,000 or anything like it if this construction traffic had not been carried. We will at all events have to take this amount from the gross earnings to find the commercial business which the management expects to increase to \$15,000,000 this year. That is, they estimate an addition of \$8,670,000 to their earnings as a carrier for other people, which will be an increase of 134 per cent. This seems to us to be a very sanguine estimate. The aggregate earnings of the Union and Central Pacific roads, 1,900 miles, in 1870, the first year they were open throughout the year, (they were open 7½ months in 1869) were \$15,620,400 gross and \$6,748,600 net. The country on the eastern end and on the plains on their line was less developed than on the corresponding parts of the Northern Pacific now; but the California end was much more developed and had a much larger population and traffic than the Oregon end of the Northern Pacific has now; and before the Central Pacific was opened through it was earning nearly \$10,000 per mile. And of course these roads had the whole Pacific through traffic then, including that of Oregon.

The Northern Pacific cannot count on any such additions to its gross and net earnings from through traffic, as the first Pacific road had the first year it was opened. It cannot get so much of it, nor so high rates for carrying it. Its prosperity must come chiefly, not from traffic which it will divert from the older roads, but from the growth of traffic on its own lines. This for several years has been extremely rapid; but it has not yet made the earnings heavy on any part of the road. On the eastern divisions about 1,000 miles were open the whole of last year, and the gross earnings of this and the parts open but part of the year were, we have seen, \$6,267,490, of which probably more than \$1,000,000 was for construction material. Of this road 586 miles are ten years old. It includes the only part of the road which has on it a large acreage under cultivation and a considerable population. The road further west must make great progress before it can have so large a traffic, and much more than can be reasonably expected in one year, without a large through business. That in time the road will have such earnings and larger even is entirely probable.

But the company will prosper with much smaller earnings. The interest and rentals will probably be something more than the \$3,500,000 which the capital issued at this time requires, but the net earnings last year were more than \$2,700,000, and we can make a

large discount from the company's estimate of \$6,000,000 for this year, and have enough to pay a good deal more than \$3,500,000. The estimate referred to would make the surplus \$2,870,000, which is nearly 7 per cent. on the preferred stock. It will not do to count on that, however. The road will do very well indeed if it earns a small surplus this first year of the through line, which is also the first year of most of the branches. If it does that there will be assurance of good profits in the future.

THE CLOSE OF THE VERMONT CENTRAL CASE.

The recent refusal of the Federal Court in Vermont to interfere with the compromise settlement of the Vermont Central litigation, at the suit of one of the few who had refused to join in that settlement, may be considered as the final close of that remarkable case. It does not appear probable that any further effort will be made to prevent the completion of the settlement, which nearly all the parties in interest were willing to accept, however unjust some of them might consider it, rather than to continue the fight.

The close of a litigation which has lasted for nearly 30 years is of itself sufficiently important to demand some notice, and the Vermont Central case is, independently of its long duration, so curious and involved a chapter of railroad history that a brief account of it will be of interest. Such an account, however, can touch only the leading points, for the case itself, were all its various intricacies and changes to be followed and were all the incidents which might shed light upon it to be brought out, would easily furnish materials for a volume rather than a page.

In 1849 the Vermont Central Railroad Company leased the Vermont & Canada road, then not quite completed, at a rental of 8 per cent. on its \$2,000,000 stock. A year later an amended lease was made, the rental remaining the same, and a clause in the new lease providing that, in case of a default in payment, the Vermont & Canada Company might take possession of both roads and run them until all arrears were paid up from their net earnings—probably the most stringent provision ever inserted in a railroad lease.

The rent was a heavy one to pay, considering the value of the road at that time. The Vermont Central Company had a considerable bonded debt to provide for in addition; its earnings were light, and the natural result followed. In November, 1854, it made default in the interest then due on its bonds, and a month later also in the rental due the Canada Company. The latter company promptly applied to the Chancery Court for authority to execute the provisions of the lease by taking possession of its own and the lessee's road. But the trustees under the Vermont Central mortgages had already applied to the Court under the authority given them for the protection of the bondholders, and, after considering both applications, the Chancellor decided to reconcile them as far as possible, and accordingly turned over both roads to the trustees, making them the receivers and managers of the joint property for the benefit of all parties in interest. This receivership continued for nearly 10 years, but its results were not altogether satisfactory, and the arrears of rental and interest were not paid.

After long negotiations a compromise was made which, it was then thought, would put an end to the litigation. The Canada Company agreed to capitalize the arrears of rental, increasing its stock from \$2,000,000 to \$3,000,000, and was to receive 8 per cent. on the whole amount, and a partial settlement was made with the Central bondholders. To secure the carrying out of this agreement both roads were to remain under the management of the trustees, and under this agreement the so-called "perpetual receivership" of 1864 was instituted.

From the proceedings had at the time it is clear that the Court regarded this arrangement as entirely dependent for its validity upon the agreement between the parties in interest, and while a formal decree was made instituting the perpetual receivership and appointing the trustees and managers thereunder, it was in evidence in the later litigation—and the statement was not contradicted—that the then Chancellor Poland—a distinguished lawyer and afterwards Congressman and Senator from the state—remarked at the time that the decree of the Court was not necessary except as a matter of form to impress the holders of securities, and that they might as well have asked the approval of a town meeting as of the Court, for all that was necessary.

Such was the opinion at the time; later it was claimed that the receivers and managers were officers of the Court and in that capacity exempt from interference from the owners of the roads.

The receivership might have resulted well, had the receivers been content with a simple management of

the property to the best advantage. But they were ambitious, and they wanted to make themselves a power in Vermont and in the railroad system of New England.

To this end they extended their operations beyond the two lines which they controlled. They built and leased the Stanstead, Shefford & Chambly road in Canada; they leased the Sullivan road, the New London Northern and the Harlem Extension to the southward and the Ogdensburg & Lake Champlain to the westward; they entered into complicated and far-reaching contracts for through business with the Grand Trunk and with the Concord and the Lowell roads and their connections between Vermont and Boston; they leased the Rutland Railroad, the chief rival and competitor of the Vermont Central, and they established steamer lines from Ogdensburg to the upper lakes in the hope of drawing a share of traffic over their lines.

The extended operations required money, and it was raised in various ways, chiefly by the issue of equipment and other guaranteed bonds, which were known as the trust debt. Some of the leases and contracts involved considerable loss, and none of them appear to have been of much profit, to the trust at least, for it was said in Vermont then that they were so managed that the profitable leases were held by the managers as individuals, while the losses were saddled upon the trust. This may have been true and may not; but at least the trust debt assumed large proportions.

Eight years after the perpetual receivership began the trustees and managers controlled the greater part of the railroad system of Vermont, and their lines carried the larger share of the business of the Grand Trunk and from Lake Ontario to Boston; but much of the business was unprofitable, and the trust debt had become enormous in comparison with the property on which it was based; moreover, the management of the trust under the nominal authority of the Court had become a grave public scandal. It was charged that the influence of the trustees was largely felt in state politics, that it controlled legislation and that the Court of Chancery was managed by the trust instead of managing it. Some exaggeration there was in these charges, no doubt, but some truth also, and an effort was made to remedy the anomalous condition of affairs.

The Legislature of Vermont chartered a new corporation, known as the Central Vermont Company, which was to acquire the Vermont Central and the Vermont & Canada roads by purchase, together with such of the leased lines as might seem expedient, and was to consolidate and bring into shape the trust debt and free the trust properties from the receivership and from all connection with the courts. The stock of the Vermont Central Company had years before been acquired by one of the trustees through purchase at a judicial sale.

The Central Vermont Company was organized in 1872, but the organization was controlled entirely by the old trustees and receivers. An application was made to the Court of Chancery, and that Court appointed the new company Trustee and Receiver of the roads, thus changing the receivership in form but not in fact.

Matters went on without much change for five years more. Nothing was done towards the purchase of the roads for which the new corporation had been chartered; default had been made on various issues of bonds, and the Vermont & Canada stockholders had received no rental since 1872. That company and the bondholders were clamorous for payment, and something had to be done. Accordingly the Central Vermont Company made application to the Court of Chancery for authority to sell the Central and the Canada roads in satisfaction of the trust debt. The Court granted an order of sale, and the matter was carried up to the Supreme Court for what was expected to be a final settlement.

In 1877 the Vermont Supreme Court gave the first and only decision in this long litigation which could be counted on the side of the stock and bondholders, who had had so little to say about the management of their property for over 20 years. This decision, in brief, was that the perpetual receivership of 1864 was not a valid receivership; that it was merely a management or trusteeship by consent of the parties in interest, and that the trust debt must be held subordinate to the lien of the Vermont Central bondholders and to the claim of the Vermont & Canada Company for rental, unless it could be clearly proved that the holders of those claims had knowingly consented to the subordination of their liens to those created by the trustees. As a necessary consequence, the order of sale was denied.

This decision put a different face upon affairs for a time. Under it there was a probability that the prop-

erty might revert to its original owners, and there was also a possibility that the old trustees and managers might be held individually liable for a part of the debt which they had incurred. To retain control of the property and to save themselves from ruin the decision must be reversed.

A suit, known as the Langdon suit, was accordingly begun, having the same object as before, to secure the sale of the trust property to satisfy the trust debt, but brought nominally by an outside holder of that debt. This suit dragged slowly along, with a favorable decision from the Court of Chancery, and was last year finally passed upon by the Supreme Court, the composition of which had been changed since the decision of 1877, by the election of some new judges, and the retirement of others.

The new decision, while in terms it respected the former opinion of the Court in relation to the receivership, practically reversed it. The Court now held that while the perpetual receivership was a management by consent, the parties in interest had given their assent to the acts of the managers, and that the trust debt must be held to be a lien in the nature of an equitable mortgage, taking precedence of the claims of the Central bondholders and the Canada rental; and that the roads might be sold to satisfy this equitable mortgage. An inquiry into the amount of the trust debt was ordered, as a preliminary to an order of sale, unless the original owners should elect to redeem their property by the payment of the debt.

This decision was the beginning of the end of the long litigation. The Vermont Central bondholders were scattered and had little to hope for from further proceedings. The Vermont & Canada stockholders, who had the advantage of a corporate organization under the leadership of a President, Mr. F. A. Brooks, who had shown both legal ability and untiring perseverance, at last gave up the fight and were ready for a compromise. They had not lost faith in the justice of the cause, but they did despair of securing anything from the courts.

The terms of the compromise can be briefly explained. A new company is organized, known as the Consolidated Railroad Company, of Vermont, which acquires the Vermont Central road by foreclosure and the Vermont & Canada by purchase. The Consolidated Company issues \$750,000 preferred stock and \$7,000,000 in 5 per cent. bonds, the preferred stock being given in exchange for the old Vermont Central bonds, holders of the first-mortgage bonds receiving 20 per cent. and of the second-mortgage bonds 10 per cent. of their face in the new security. Of the bonds \$4,357,000 are exchanged for the various issues of trust bonds at their face value; \$1,643,000 are used to pay the floating debt of the trust, including a claim of the Central Vermont Company, while the remaining \$1,000,000 are exchanged for the Vermont & Canada stock, whose holders thus accept one-third of the face value of their stock and surrender their claim for 11 years' unpaid rental.

Under this arrangement, it will be seen, the creditors of the trust receive six-sevenths of the securities having a fixed charge upon the property, while the stockholders of the Canada Company have to be content with the remaining one-seventh, and the Central bondholders with a security whose value is wholly contingent upon the future earnings of the property. That is, the claims of those who held what they had a right to consider a prior lien are wholly subordinated to a debt contracted by a management entirely beyond their control, and for purposes largely foreign to the original intention of the trust. But it is apparently the best that they can do, and they are probably right in accepting anything rather than continuing the litigation, from which they have gained nothing in the past and which promises them nothing in the future.

A plain statement of the facts in this case, as full as it can be made without undue length, is all that has been aimed at. It is too late now and this is not the place to bring charges against any individual or to make insinuations against the integrity of any courts. It is evident, however, that the Vermont Central case is one in which the holders of railroad securities have been deprived of a large share of their property not without, but by, "due process of law," and the result is one of those which may hereafter be quoted to the discredit of American railroad management and American law.

But after all there is a possibility that the case may not be ended. A circular, issued only yesterday by the directors of the Vermont & Canada Company, warns the stockholders of that company that there are indications that the compromise agreement has not been fully complied with, and advises them not to part with their stock until it is evident that the other

parties to it have fully done their part. This may be excessive caution, but the past history of the case does not warrant over-confidence, and their advice is prudent, even if it should prove to be unnecessary. It is to be hoped that they are mistaken, for the settlement, inequitable as it may be, seems to offer more to the stockholders whom they represent than they can hope to gain from a further continuance of the contest.

August Accidents.

Our record of train accidents in August, given in full elsewhere, shows for that month a total of 144 accidents, in which 42 persons were killed and 136 injured. The record is not the longest which we have had this year, but is still a long one for midsummer.

As compared with August, 1882, there was an increase of 5 accidents; a decrease of 4 in the number killed, and a decrease of 82 in that of injured.

The record includes 59 collisions, in which 23 persons were killed and 50 injured; 75 derailments, in which 18 persons were killed and 82 injured, and 10 other accidents, in which 1 person was killed and 4 injured. Twenty-two of the killed and 84 of the injured in the collisions were railroad employes, as were 15 of the killed and 30 of the injured in the derailments and also the single person killed and one of the injured in the other accidents. The record includes but one accident with a large number of casualties.

These accidents may be classed as to their nature and causes as follows:

COLLISIONS:	
Rear collisions.....	33
Butting collisions.....	20
Crossing collisions.....	6
DERAILMENTS:	
Broken rail.....	2
Broken frog.....	2
Broken switch rod.....	2
Broken bridge.....	2
Spreading of rails.....	7
Broken wheel.....	3
Broken axle.....	6
Accidental obstruction.....	4
Cattle on track.....	7
Wash-out.....	1
Wind.....	1
Open draw.....	1
Misplaced switch.....	9
Rail purposely removed.....	1
Unexplained.....	27
OTHER ACCIDENTS:	
Boiler explosion.....	1
Broken coupling or parallel rod.....	4
Broken truck not causing derailment.....	1
Broken draw-bar not causing derailment.....	1
Broken axle not causing derailment.....	1
Accidental obstruction not causing derailment.....	1
Car burned while running.....	1
Total.....	144

Eight collisions were caused by trains breaking in two; eight by misplaced switches; three by mistakes in orders or failure to obey them; one each by a runaway car, by cars carelessly left on main track, and by fog. In several other cases there is little doubt that collisions were caused by mistakes in orders.

Of the two broken bridges one was an ordinary wooden trestle, no reason for the failure being given; the other was a wooden bridge which had been damaged by fire.

A general classification of the causes of these accidents may be made as follows:

	Collisions.	Derailments.	Other.	Total.
Defects of road.....	15	15	15	45
Defects of equipment.....	8	11	8	27
Negligence in operating.....	50	10	1	61
Unforeseen obstructions.....	1	11	2	14
Misplaced switches.....	1	27	1	29
Unexplained.....	27	1	1	29
Total.....	50	75	10	144

Negligence in operation was thus the direct cause of 41.7 per cent. of the whole number of accidents. Most of the unexplained derailments can probably be attributed to defects of road or equipment.

A division of the accidents and the resulting casualties according to classes of trains is made as follows:

Accidents:	Collisions.	Derailments.	Other.	Total.
To passenger trains.....	2	23	5	30
To a pass. and a freight.....	11	5	1	17
To freight trains.....	40	52	5	103
Total.....	50	75	10	144
Casualties:				
Killed by.....	23	18	1	42
Injured by.....	50	82	4	136
Total.....	73	100	5	178

This shows accidents to a total of 203 trains, of which 43, or 21.2 per cent., were passenger trains, and 160, or 78.8 per cent., were freight trains. As has been before noted, this is probably above the real proportion of passenger trains, as slight accidents to freight trains are much more likely to escape notice than those to passenger trains.

Of the total number of accidents 93 are recorded as happening in daylight, 50 at night, while in one case only there is nothing in the record to indicate the time of day. The proportion of night accidents is small.

The persons killed and injured are divided as follows:

	Killed.	Injured.	Total.
Employees.....	38	65	103
Passengers.....	4	71	75
Total.....	42	136	178
Per cent. of employees.....	90	48	58

The large proportion of employes among the killed shows clearly how they occupy the post of danger in an accident.

Of the 59 collisions, 14 caused death and 19 lesser injury; of the 75 derailments, 12 caused death and 16 injury; and of the 10 other accidents, 1 caused death and 9 injury. In

all 27 accidents caused the death of one or more persons, while 30 caused injuries, but not death, leaving 87, or 60.4 per cent. of the whole number, in which no serious injury to persons is recorded.

August is the last of what are usually called the summer months, and the three months of that season compare with last year as follows:

	Accidents.		Killed.		Injured.	
	1883.	1882.	1883.	1882.	1883.	1882.
June	91	72	38	35	95	193
July	119	92	57	18	204	56
August.....	144	139	42	46	136	218
Total....	354	303	137	99	435	467

The comparison for this year is decidedly unfavorable except in the number of injured, which may be changed easily by one or two bad accidents.

The month was not, upon the whole, unfavorable to railroading as far as the weather was concerned. It was, in most parts of the country, somewhat dryer and cooler and with fewer violent storms than usual, the earlier summer months having had more than their share of cyclones and thunder storms, and August somewhat less.

The comparative freedom from accidents resulting from elemental causes, was, however, more than made up by the increased number of what may be called accidents of management. The number of collisions was large, and of these an unusual proportion were butting and crossing collisions. Collisions, with but few exceptions, are accidents of management, but the butting and crossing collisions necessarily come from carelessness somewhere, either in the general or the immediate executive management, the station operator or the trainmen. The general management may neglect to provide proper signals, or its rules and methods may be defective; the Superintendent or the train dispatcher may make a blunder; the operator may forget or misinterpret an order, and the trainmen may forget it or neglect to obey it when received, but one or more of these deficiencies there must be before the collision can occur.

The overworking of employes is often referred to as a cause of accident, and probably with truth, although there is apt to be exaggeration in popular ideas on the subject. One of the worst accidents of the month, if the reports are correct, resulted from the blunder of an operator who was but a boy of 17, too young for the responsibility put upon him, and who had been on duty for over 14 hours when he made the fatal mistake.

So much has heretofore been said about misplaced switches, that it is only necessary to note here that they caused last month 8 collisions and 9 derailments, 17 accidents in all.

The six broken axles and the eight collisions resulting from the breaking in two of trains may call attention again to the inadequacy of running gear and couplings to the heavy car-loads and long freight trains of the present day.

But one malicious derailment is recorded, and it was effected by the removal of the fastenings from a rail, leaving a gap in the track.

For the year ending with August the record is as follows:

	Accidents.	Killed.	Injured.
September.....	153	34	138
October.....	136	47	132
November.....	125	36	129
December.....	148	29	209
January.....	168	55	199
February.....	184	61	186
March.....	142	13	137
April.....	106	26	114
May.....	120	28	77
June.....	91	38	95
July.....	119	57	204
August.....	144	42	136
Total.....	1,636	406	1,754
Total, same months, 1881-82.....	1,323	407	1,558
" " " 1880-81.....	1,461	394	1,518
" " " 1879-80.....	891	239	954

The yearly average for the four years was 1,328 accidents, 377 killed and 1,446 injured, which is considerably below the totals for this year.

The averages per day for the month were, 4.65 accidents, 1.35 killed and 4.39 injured; for the year they were 4.48 accidents, 1.28 killed and 4.81 injured.

The average casualties per accident were, for the month, 0.292 killed and 0.944 injured; for the year, 0.285 killed and 1.072 injured.

The averages per month for the year were 136 accidents, 39 killed and 146 injured. August was above the average in the number of accidents and the number killed, but below it in the number injured.

Memphis to Kansas City.

The Kansas City & Memphis line about to be opened by the Kansas City, Fort Scott & Gulf Company makes a route different from any that has existed heretofore, on which the current of traffic, be it large or small, will differ from any that has heretofore existed. Further north every traffic centre was early supplied with a railroad extending northward from it. Indeed, the idea of a traffic centre in this country is of a place which receives traffic from lines radiating west of its meridian—to the west, the northwest, the southwest, the north, the south. Cincinnati, the first of the important Western traffic centres, depended upon the rivers for connection with the Southwest, and until very recently went without a direct connection with the South; but it early obtained lines throughout the quadrant from the west to the north. St. Louis, another river town, had more extended river connections, which delayed its railroad system, but its first lines westward were to the west and north-west, and the northwestern quadrant is much better supplied with railroads than the southwestern, in which the Iron Mountain has been completed across Arkansas but

about ten years, and has had no branches there until very lately. Chicago also developed lines to the northwest very early. But in the South lines to the northwest have been late developments. Even New Orleans has had one only about a year, and Memphis, which was one of the most promising young towns in the country before the war, has not had any till now. At New Orleans we may account for this by the fact that the Red River served to connect it with the country northwest of it; but at Memphis other influences came into play. There the course of traffic is probably no greater directly eastward to the seaboard, than northeastward, either up the Ohio or by rail to a connection with the trunk lines. The great domestic market for Southern as well as Northwestern productions is in the Northeast—north of the Potomac and east of the Ohio, roughly speaking, within a line from the Chesapeake to Lake Erie far enough south and west to take in Baltimore, Washington, Wheeling, Pittsburgh and Cleveland. The cotton that Memphis receives from the northwest would be as likely to be shipped northeast as east or south, so that a line directly to the east or to the northeast may make a shorter outlet from the plantation than one southeast to Memphis. Again, the cotton production does not extend far north of the latitude of Memphis, and it is not a market for the export of the grain and provisions raised further north.

It may be said, however, that Memphis has had and has no rail connection with the country southwest of it, which is all a cotton country, and that the new road gives it a line to the northwest before it has one in any other direction beyond the Mississippi, except to the west. It does, however, receive some freight from the Iron Mountain road by way of the Memphis & Little Rock; but the further south we go from Memphis the greater becomes the competition of New Orleans. As, however, St. Louis by means of a railroad has succeeded in getting a great amount of cotton from the country far south of Memphis, it would seem that Memphis should also be able to meet New Orleans competition for the production of this country, if provided with a line interested in carrying to it only—such a line as a southwestern extension of Memphis & Charleston, the Louisville & Nashville, or the Chesapeake, Ohio & Southwestern would be.

But as the country grows and local interchanges increase lines are required which run counter to the prevailing course of traffic. Any where in the Northwest a line such as that between Memphis & Kansas City, having so large a country without railroads on its line, would be well supported by the local traffic. From the Iron Mountain road near the St. Francis River to the St. Louis & San Francisco at Springfield, a distance of about 180 miles, it is crossed by no railroad, and most of this distance it is more than 100 miles to any other railroad on the southwest and from 40 to 100 miles on the north. Between Memphis and the main line of the Iron Mountain road, about 80 miles, it is crossed by two new roads, the Helena Branch of the Iron Mountain and the Texas & St. Louis, and by the navigable St. Francis River.

On the whole line from Springfield to Memphis, the population by the census of 1880 within 20 miles of the road was only about 108,000, which is just about the same as that of the eastern tier of six Kansas counties south of the Kaw River through which the main line of this road runs, which have but 3,000 square miles of area, against 10,000 square miles in the belt 40 miles wide from Springfield to Memphis. This thinness of the population accounts for the absence of railroads heretofore in so extensive a territory. The average township six miles square has less than 300 inhabitants. On the main line the average per township is 1,300. The railroad will doubtless cause a growth, but perhaps not a great one. On the Iron Mountain road in Arkansas, after the road had been open six years and more, and through a better part of the state, the population in many counties on its line was below 400 per township. The counties on its line increased in population from 158,057 to 218,689, or 38 per cent., from 1870 to 1880, according to the census, it is true; but the census of 1870 was extremely imperfect in this and other Southern states, and evidently did not make the population large enough then. Moreover, the increase reported in the counties away from the Iron Mountain's line, in which scarcely any railroad had been opened during this decade, was from 826,414 in 1870 to 533,836 in 1880, or 79 per cent., more than twice as fast as on the new railroad, so that, so far as these figures indicate anything, growth of population was not stimulated by the railroad. And probably it was not much. The Iron Mountain's traffic and earnings grew very little until 1879 and then when they began to grow fast it was largely and probably chiefly due to the growth of Texas and the great extension of the Texas railroads of which it is the outlet.

The Iron Mountain, however, had almost from the first traffic enough to support a railroad of moderate cost. Then it had, what the new railroad will have, an immense area of thinly peopled territory to support it. The through traffic between Memphis and Kansas City, can hardly be very great at this time, but will grow. Corn, flour, provisions and manufactured goods are what Memphis takes from the North. Kansas City and the country on the western part of this road produce great quantities of grain and provisions, and will certainly get a share of the trade, but they must compete for it with all the country along the Mississippi and the Ohio, which also produce their staples for export, and have the cheap river transportation to help them. What Memphis can ship to Kansas City it is not so easy to see. It cannot compete with St. Louis, Chicago, and the Eastern cities in merchandise, and Kansas and Western Missouri do not want cotton. The

sugar, coffee and tropical fruits that may come from New Orleans by this route cannot make an important amount of freight. The road will probably depend chiefly—more even than most roads—on its local traffic, which so wide a belt of country, even if it is not very productive, ought to supply abundantly.

Erie Earnings in May and June.

The statement of the New York, Lake Erie & Western for May, we learn, does not include under "gross earnings" the total earnings of the leased New York, Pennsylvania & Ohio, but only the 68 per cent. of them to which the lessee is entitled (in case the other 32 per cent. are enough to make a sum equal to the net earnings of 1882). But the whole of the working expenses are given under that head, so that what is reported as net earnings is the true net earnings of the New York, Lake Erie & Western Company after paying rental. The published statement for this year, therefore, gave less than the actual gross earnings of the united roads by 32 per cent. of the New York, Pennsylvania & Ohio earnings, the amount of which was not given; and therefore all our comparisons of both gross and net earnings with those of previous years are vitiated. The net earnings reported this year are smaller than the aggregate net earnings of the two roads by the amount of the rental, or rather by 32 per cent. of the gross earnings of the New York, Pennsylvania & Ohio, which is the minimum rental. Should this not be sufficient in the course of the year to make a sum equal to the net earnings last year (\$1,757,055) the difference will have to be paid by the Erie; but of course the result of a single month's earnings cannot determine this, as profits will be larger than the average in some months and smaller in others.

An accurate comparison of the results of working the united roads can be made by adding 68 per cent. of the gross earnings of the New York, Pennsylvania & Ohio in previous years to those of the Erie, and subtracting the aggregate working expenses of the two roads from them. This will give the receipts and profits of the Erie as they would have been had the lease been in operation previous to this year, as follows, for May:

	Receipts.	Expenses.	Profit.
1878.....	\$1,368,404	\$1,165,599	\$202,805
1879.....	1,566,131	1,400,050	226,081
1880.....	1,828,292	1,250,419	577,843
1881.....	2,007,741	1,591,287	506,454
1882.....	2,003,284	1,341,580	661,724
1883.....	2,055,988	1,424,033	631,955

Thus the profit this year is nearly the same as last year, and greater than any previous year, and not less than in any since 1879, as the comparison last week indicated.

Care must be taken not to take these figures for anything but what they are. What we have given as "receipts" are not gross earnings, but considerably less, but the "expenses" are the full working expenses, and are therefore a much larger proportion of the "receipts" here given than of the total gross earnings. For instance, last year the aggregate working expenses of the two roads in May were 62½ per cent. of their aggregate gross earnings; by the method of reporting used by the Erie they would have been nearly 67 per cent.

It should be said that the New York, Lake Erie & Western has always reported in this way the earnings of such roads as it leases for a percentage of their gross earnings, which include the Northern New Jersey and the Buffalo & Southwestern. The gross of earnings of these, however, do not average more than \$50,000 or \$60,000 a month, and the difference between giving the gross earnings less the rental and the total gross earnings is probably only about \$20,000 per month, whereas with the New York, Pennsylvania & Ohio it has amounted to \$175,000.

As a means of estimating the financial position of the Erie, the statement of "net earnings," as it renders them, is perfectly good. It eliminates the liabilities on account of the New York, Pennsylvania & Ohio, or as completely as possible, while the results of the entire year's operations of that road are unknown. What is reported as "net earnings" is substantially that amount which the company has to apply to other purposes than New York, Pennsylvania & Ohio rental, which so far as ascertainable, has already been deducted.

Since writing the above we have a report of the gross earnings of the New York, Pennsylvania & Ohio in May. They were \$592,080, and \$109,306 more than last year. Taking 68 per cent. of this from the earnings reported by the Erie for May, we have \$1,660,174 as the gross earnings of the Erie on its other roads, which is \$21,624 less than last year, and \$116,716 less than in 1881, but more than in any previous year. The aggregate gross and net earnings of the two roads were:

	1880.	1881.	1882.	1883.
Gross earnings..	\$1,931,933	\$2,472,259	\$2,154,572	\$2,242,254
Expenses.....	1,250,419	1,591,287	1,341,580	1,424,033
Net earnings...	\$681,560	\$880,972	\$813,022	\$817,321

This makes the net earnings slightly larger this year than last, and about 4 per cent. less than in 1881. The earnings of the New York, Pennsylvania & Ohio were the largest this road has ever had, and the 32 per cent. paid as rental is \$186,266, which is about \$40,000 more than the monthly minimum rental guaranteed by the lessee. The traffic which the Chicago & Atlantic has given to the road is likely to have still further increased the gross earnings since May.

We have now the Erie statement for June, made as for May, with but 63 per cent. of the New York, Pennsylvania & Ohio earnings included in the gross earnings. Making

a comparison with a similar statement for previous years the figures are:

	1880.	1881.	1882.	1883.
Receipts.....	\$1,946,362	\$2,369,132	\$2,070,234	\$2,037,547
Expenses.....	1,233,854	1,370,153	1,420,000	1,441,825
Net.....	\$712,408	\$998,979	\$650,234	\$595,722

The "net" here previous to this year are not what the Erie's net earnings actually were without the New York, Pennsylvania & Ohio, but what they would have been by the terms of the present lease.

Its actual net earnings have been:

	1879.	1880.	1881.	1882.	1883.
\$290,523	\$716,108	731,230	\$685,802	\$615,722	

They are this year about 10 per cent. less than last, 16 per cent. less than in 1881, 14 per cent. less than in 1880, but 112 per cent. more than in 1879, and more than the average monthly net earnings last year. The rental of the New York, Pennsylvania & Ohio is already deducted, it must be remembered.

This makes the net earnings (over rentals of lines leased for a percentage of their earnings) as follows for nine months of the fiscal year ending with June in the six years since the reorganization:

1877-78, 1878-79, 1879-80, 1880-81, 1881-82, 1882-83, \$3,673,207 \$3,339,915 \$5,137,210 \$5,683,920 \$4,601,033 \$4,003,414 They are this year very nearly the same as last, \$1,090,506 (19 per cent.) less than in 1881, \$533,796 (10.4 per cent.) less than in 1880, and very much more than in the other two years.

The three months of the fiscal year which remain to be reported were the best months of last year. To do as well as then will be doing very well indeed.

Record of New Railroad Construction.

This number of the *Railroad Gazette* contains information of the laying of track on new railroads as follows:

Atchison, Topeka & Santa Fe.—Track laid on the *Kansas City & Emporia Branch* from Emporia, Kan., east to Necosho Rapids, 11 miles.

Atlantic & Danville.—Track laid from Claremont Wharf Va., westward 5 miles.

Chicago, Milwaukee & St. Paul.—The *James Rice Branch* is extended from Ashton, Dak., south to Wolsey, 41 miles. The *Okoboji Branch* is extended from Lake Okoboji, Ia., north to Spirit Lake, 7 miles.

Columbus, Hope & Greensburg.—Track laid from Greensburg, Ind., west to Hope, 17 miles.

Florida Southern.—Extended from Gainesville, Fla., northwest to Hague, 11 miles. Gauge, 3 ft.

Georgetown & Lanes.—Track laid from Georgetown, S. C., westward 20 miles.

Kanawha & Coal River.—Completed from Davis Creek, W. Va., southward to Black Band mines, 15 miles.

New York, West Shore & Buffalo.—Extended from Syracuse, N. Y., west 40 miles; also from Akron, N. Y., east 20 miles.

Northern Pacific.—Track is laid on the *Pacific Division* from Portland, Oregon, north to Lenore, 41 miles. The *Fargo & Southwestern Branch* is extended from Lisbon, Dak., west by south to Lamoure, 30 miles.

Texas & St. Louis.—The *Magnolia Branch* is completed from McNeil, Ark., southward to Magnolia, 7 miles. Gauge, 3 ft.

Union Pacific.—A branch has been completed from Transfer station into Council Bluffs, Ia., 1½ miles. The *Oregon Short Line* is extended from Kuna, Idaho, northwest to Caldwell, 15 miles.

Vicksburg, Shreveport & Pacific.—Extended from Monroe, La., westward 21 miles. Gauge, 5 ft.

Wisconsin, Pittsville & Superior.—Track laid from Remington, Wis., north to Dexter, 6 miles.

This is a total of 308½ miles of new railroad, making 3,995 miles thus far this year. The total new track reported in our columns to the corresponding date for 12 years past has been as follows:

	Miles.		Miles.
1883.....	3,995	1877.....	1,396
1882.....	7,285	1876.....	1,677
1881.....	4,774	1875.....	804
1880.....	3,607	1874.....	1,396
1879.....	2,224	1873.....	2,778
1878.....	1,267	1872.....	4,070

The statements include main track only, no account being taken of second tracks or other additional tracks or sidings.

This week's report is about the largest we have had this year, and brings the total for the year thus far very nearly up to 4,000 miles.

THE INCREASE OF FREIGHT TONNAGE ON NEW YORK RAILROADS from 1874 to 1882 we gave last week as 72.7 per cent., while the increase in tonnage mileage was 73 per cent. The increase in number of tons carried was taken from the pamphlet referred to, in which the number on the Pennsylvania Railroad in 1874 was given as nearly 29 millions of tons, when actually it was but 16½ millions. In our table a correction was made for the Pennsylvania tonnage, but not for the aggregate tonnage of the six roads in 1874, which should have been 38½ millions instead of 50½. The amount of increase in tons from 1874 to 1882 we gave correctly, but the percentage of increase was 96 per cent., instead of 72.7, and therefore the rate of increase in freight traffic or tonnage mileage (76 per cent.) was much less and not a little greater than the increase in tons carried, showing that there was a much greater increase in local freight, or rather in short hauls, than in freight over the whole length of the roads.

CHICAGO THROUGH RAIL SHIPMENTS EASTWARD by the eight railroads for the week ending Sept. 14, by the complete report, were 49,731 tons, which is a trifle less than by

the incomplete report for the week ending one day later, instead of 10 or 12 per cent. more, as is usually the case. For four successive years the shipments in this week have been:

	1880.	1881.	1882.	1883.
	31,260.	64,765.	36,878.	49,731.

Thus the shipments this year were 12,853 tons (35 per cent.) more than last year, when rates were the same, 15,034 tons less than in 1881, when rates were but half as great, and 18,471 tons more than in 1880, when rates were a fifth higher. The two new roads carried 12,556 tons, so that the six old roads carried nearly the same as last year (297 tons more) and much more than in 1880.

The percentage carried by each road this year and last was:

	1880.	1881.	1882.	1883.
N. Y. C. & St. L.	10.0	12.8	14.9	21.7
Chic. & Atl.	14.3	21.1	21.5	28.3
B. & O.				9.0
C. St. L. & P.				6.3
Lake Shore				14.7
Mich. Cen.				10.6
C. & G. T.				

Compared with the previous week, there is a decrease in percentage of 2.5 by the Chicago & Atlantic and of 3.1 by the Chicago, St. Louis & Pittsburgh, and smaller decreases by the Michigan Central, and the Baltimore & Ohio. The increases were 3.3 by the Nickel Plate, 1.7 by the Fort Wayne, and 1.3 by the Chicago & Grand Trunk, and 0.5 by the Lake Shore.

For seven successive weeks the shipments have been:

	Week ending	Aug. 7.	Aug. 14.	Aug. 21.	Aug. 28.	Sept. 5.	Sept. 12.	Sept. 19.	Sept. 26.
		24,453	33,487	32,432	38,500	39,105	46,947	49,731	

The increase over the previous week was thus much more moderate than was indicated by the incomplete reports telegraphed from Chicago—only 2,784 tons, or 6 per cent. The shipments were, however, among the very largest ever made while rates were maintained and navigation was open.

For the week ending Sept. 29 the imperfect report of through and local shipments of flour, grain and provisions by these roads gives a total of 48,254 tons, against 35,611 tons in the corresponding week of last year and 49,624 in the previous week of this year. There is thus a slight decrease from the previous week. It was not to be expected that shipments should continue to increase; they remain unusually large. The changes from the percentages reported for the previous week are considerable, the chief being a decrease of 3.8 on the Chicago & Atlantic, exactly balanced by an increase of 3.8 on the Baltimore & Ohio, and gains of 1.6 on the Chicago & Grand Trunk and of 0.9 on the Lake Shore; balanced by losses of 2.2 by the Fort Wayne and 0.3 by the Michigan Central. There is no change on the Nickel Plate and the Chicago, St. Louis & Pittsburgh. The Michigan Central's proportion remains, as it long has been, exceptionally small, the Nickel Plate carrying just as much. These percentages, however, in the imperfect report may be considerably modified in the complete one. Below we give the true percentages from the complete reports for all the weeks since July except the last one, for which the figures are from the incomplete report:

Week to	C. & G. T.	Mich. Cen.	Lake Shore	Fort Wayne	C. St. L. & P.	B. & O.	Chic. & Atl.	N. Y. C. & St. L.
Aug. 7.	12.5	15.3	15.9	22.5	11.9	8.6	8.0	5.3
" 14.	10.0	14.2	16.3	22.2	11.1	7.8	13.6	4.8
" 21.	11.8	13.7	15.3	20.5	13.9	6.3	13.8	4.2
" 28.	11.8	10.2	15.2	21.0	17.7	6.6	13.5	4.0
Sept. 5.	8.7	13.7	14.4	20.0	12.1	6.8	17.2	7.3
" 12.	10.0	12.8	14.9	21.7	9.0	6.3	14.7	10.6
" 19.	13.4	11.6	16.6	12.6	10.4	9.8	11.0	11.6

The two old Vanderbilt roads have had extremely small percentages of the whole all this time, considering that under the last apportionment they were awarded 45½ per cent. of the traffic and under the old one 49 per cent. The Lake Shore makes a considerable gain in the last week (by an incomplete report, it must be remembered), but the Michigan Central is below the average of the six weeks previous, even, which average was 18.3 per cent. The Nickel Plate has made a very decided gain, however, but what it carries may not have been for the New York Central. The Fort Wayne shows an unaccountable falling-off in the last week.

The shipments since Sept. 7 will be of especial interest in view of the action taken to prevent any irregularities of rates at about that time.

COLORADO TRAVEL. we showed last week, was 85 per cent. less in the first half of this year than in the corresponding period of last year, as shown by the passenger earnings of the Colorado pool, which includes all travel between the Missouri River and Denver. Further evidence of a decline in Colorado business is shown by a lumber dealer reporting the condition of the lumber trade in Denver to the Northwestern Lumberman. He says that for this year sales have been at least 30 per cent. less than last year.

IMMIGRATION IN AUGUST was not much less this year than last, which may indicate that the rapid decrease of a year or two past will not last much longer. The arrivals this year were 38,888, against 43,076 last year and 56,744 last in 1881.

Arrivals of immigrants in August were exceeded in September and October last year and the year before; but

much the largest arrivals are usually in April, May and June. In 1881 43 per cent. of the arrivals were in this 25 per cent. of the year, and in 1882 46 per cent.

PENNSYLVANIA RAILROAD EARNINGS AND EXPENSES IN AUGUST for all lines east of Pittsburgh and Erie this year and last were:

	1883.	1882.	Inc. or Dec.	P. C.
Gross earnings	\$4,775,380	\$4,671,179	Inc. \$104,201	2.2
Expenses	2,632,756	2,638,317	Dec. 5,561	0.2
Net earnings	\$2,142,624	\$2,032,862	Inc. \$109,762	5.4

The changes from last year are small, but are in a favorable direction. There had been a decrease in net earnings in June and May, amounting to \$509,000, which is thus interrupted, and that in a month when last year the earnings were the largest for many years.

For eleven successive years the gross and net earnings and working expenses of this road in August have been:

	Gross earnings.	Expenses.	Net earnings.
1873.	\$3,410,271	\$2,257,910	\$1,152,361
1874.	3,303,931	2,137,747	1,166,184
1875.	3,220,865	1,939,587	1,281,278
1876.	3,305,022	1,707,565	1,597,457
1877.	2,783,115	1,609,097	1,174,018
1878.	2,972,601	1,485,950	1,486,651
1879.	2,982,718	1,725,718	1,257,000
1880.	3,724,355	2,168,874	1,555,481
1881.	3,809,978	2,365,472	1,444,506
1882.	4,671,179	2,638,317	2,032,862
1883.	4,775,380	2,632,756	2,142,624

Thus though the increase in gross earnings over last year is small, it is \$965,000 (25 per cent.) over 1881, and the gain in net earnings over that year is \$698,000, or 48 per cent. The gross earnings last August were, indeed, the largest the road has ever had in any month of any year, and the net earnings are the largest except in September and October, 1876, the two months of heaviest Centennial travel. The gain over July this year is no less than \$650,000, or 43 per cent. There is usually a considerable increase in August over July, but it is extraordinary this year, and indicates an unusual revival of traffic.

For the eight months ending with August the earnings and expenses of those lines east of Pittsburgh show the following increases over last year: \$1,787,734 (5.7 per cent.) in gross earnings, \$1,503,626 (7.7 per cent.) in working expenses, and \$284,108 (2.4 per cent.) in net earnings. For seven successive years these have been for the eight months:

	Gross earnings.	Expenses.	Net earnings.
1877.	\$18,989,648	\$12,617,050	\$6,372,598
1878.	19,961,272	12,377,680	7,583,592
1879.	21,179,685	13,077,215	8,102,470
1880.	26,606,074	15,654,678	10,951,396
1881.	29,141,240	17,210,907	11,930,333
1882.	31,471,178	19,601,299	11,869,879
1883.	33,245,912	21,104,925	12,140,987

All are larger this year than ever before, but in net earnings there has been little change for the last three years.

For these eight months the lines west of Pittsburgh and Erie show a surplus over all liabilities of \$557,180, which is \$64,722 less than last year. For five successive years the surplus or deficit of these lines for the eight months has been:

	1879.	1880.	1881.	1882.	1883.
Deficit.					
Surplus.	\$236,854	\$1,879,249	\$2,160,087	\$621,902	\$557,180

Adding this to the net earnings of the eastern system we have as the profits of the Pennsylvania Railroad Company from these two systems:

	1879.	1880.	1881.	1882.	1883.
	\$7,865,616	\$12,830,645	\$14,092,720	\$12,491,781	\$12,711,167

Showing that there is little difference in the profits of 1880, 1882 and 1883.

The surplus of the western system in August has been in each of these five years:

	1879.	1880.	1881.	1882.	1883.
	\$185,904	\$267,286	\$355,777	\$266,872	\$247,490

The changes, considering the vast extent and large gross and net earnings of this system, are inconsiderable. The surplus for the month, it appears, was four-fifths that of the entire six months previous.

The statement for the whole property for August is an unexpectedly favorable one, showing, as it does, larger gross and net earnings than in any previous year.

THE SCRAP HEAP.

Locomotive Building.

The Hinckley Locomotive Co. in Boston is building locomotives on orders from the Canadian Pacific, the Chicago, Burlington & Quincy and the Grand Trunk companies. The Taunton Locomotive Works in Taunton, Mass., are busy, with several orders of locomotives to be filled.

H. K. Porter & Co., Pittsburgh, have a number of light locomotives in progress, and their shops are well occupied.

Car Notes.

The Pennsylvania Railroad shops at Altoona, Pa., are building a number of new standard passenger cars for the road.

The Pittsburgh, Fort Wayne & Chicago shops in Allegheny, Pa., have just completed a very handsome and well-furnished private and business car for the use of Manager Baldwin.

The Intercolonial shops in Moncton, N. B., are building two flangers, one wing-plow and two snow-plows for the road.

Mr. A. J. Twigg, contractor for the Georgetown & Lanes road, has recently built at Georgetown, S. C., 50 freight cars for the road.

Bridge Notes.

The Smith Bridge Co. in Toledo, O., has taken the contract for the bridge over Rifle River in Michigan, on the new Detroit, Bay City & Alpena road. The bridge will have one span of 150 ft. and one of 100 ft., and will be 70 ft. above the river.

Iron Notes.

The Thomas Iron Co. at Catsaunus, Pa., has elected the following directors: Benjamin G. Clarke, Samuel Thomas,

William W. Marsh, John T. Knight, Charles Stewart, Daniel Runkle and Samuel Drake.

The stockholders of the Co-operative Iron & Steel Works, of Danville, Pa., will meet on Oct. 6 to consider a big change in the nature of the corporation. It is proposed to accept the provisions of the new Constitution and the incorporation act of April 29, 1874, changing the name of the company to the Danville Steel Co. The feeling among the stockholders is reported to be strongly in favor of the change.—*American Manufacturer.*

A feat unparalleled in the history of rail rolling was accomplished at the steel rail mill of the Scranton Steel Co. Steel rails 120 ft. long were rolled direct from the soaking pit. This has never before been done either in Europe or America. Rails have been rolled direct from the pit, but not 120 ft. in length.—*North American.*

The Clymer Iron Co. in Reading, Pa., has been reorganized with Hiestor Clymer President and Abraham Sweitzer Secretary.

The North Chicago Rolling Mill Co. will soon add to its works at Bay View, Wis., a large nail mill.

The Black Band Coal & Iron Co. has completed a blast furnace on the Kanawha River at the mouth of Davis Creek, near Charleston, W. Va. The furnace is making 30 tons of iron a day.

Manufacturing Notes.

The Penfield Block Co. in Lockport, N. Y., states that the loss sustained by the recent fire immediately adjoining the works was not of such a nature as to retard the prompt filling of all orders. The company also desires to state, for the benefit of others, that this is the second time these works have apparently been preserved from very serious loss by fire, by the use of pails and casks kept in the works and always filled with water. These were ready for use at the critical moment, a new illustration of the old saying, "a stitch in time saves nine."

The Pond Machine Tool Co. in Worcester, Mass., recently shipped to Pittsburgh a very heavy lathe. It weighs 35 tons and can take in work 5 ft. in diameter.

The Western Union Wire Fence Co., recently organized, has its works in St. Louis now in full operation.

The French Spiral Spring Co., which is building a large mill between Twenty-fifth and Twenty-sixth streets, below Penn avenue, are drilling a well for gas. This will be one of the largest spiral spring works in this country, and will be provided with the most improved machinery.—*Pittsburgh American Manufacturer.*

The Linn Iron Works in Birmingham, Ala., have just completed a plate shearing machine weighing 40 tons, which will shear a plate 75 in. wide.

The Rail Market.

Steel Rails.—The only sales reported are of small lots, for which quotations are \$37 to \$38 per ton at mill. Some large orders are reported to be on the market, but the buyers are not willing to go over \$36, and none have been placed this week.

Rail Fastenings.—Spikes are unchanged at \$2.60 per 100 lbs. in Pittsburgh, where also track-bolts are quoted at \$3 per 100 lbs. for square nuts, and \$3.20 to \$3.25 for hexagon. Splice-bars are steady at 1.9 cents per pound.

Old Rails.—Philadelphia quotations are \$23.25 to \$23.50 per ton for iron rails, with few sales. A sale of old iron rails at \$23.50 in Pittsburgh is reported.

The Lead-lined Journal Box Patent.

In his recent decision in the interference case between Tannis V. LeRoy and David A. Hopkins, the Commissioner of Patents has awarded to LeRoy priority for the peculiar arrangement claimed by him, but the broad claim of Hopkins, upon which priority of invention is awarded to him, seems to cover the case and leave him substantially in command of the field. In his final decision, rendered Aug. 31, the Commissioner says:

"On the broad claim as well as the specific claim covering the device embodying not only the broad but the specific invention of a journal-bearing with a soft metal lining with ridges or projections so arranged that, upon being brought in contact with the axle, the ridges or projections will yield and be spread out so as to make a perfectly fitting box, priority of invention must be awarded to Hopkins."

The Baltimore & Ohio Employees' Relief Association.

The August statement of this association shows the payment of benefits to 724 members in all, as follows: Main Stem, Transportation Department, 60; Machinery Department, 231; Road Department, 95; Trans-Ohio Divisions, 113; Pittsburgh Division, 70; physicians' bills, 135. The benefits paid for sickness varied in amount from \$0.50 to \$130; the payments for deaths from \$200 to \$1,000. It is the practice of the Association to issue monthly a large sheet containing the names of all those to whom benefits were paid during the preceding month, with the nature of the injury or sickness in each case. This sheet is posted in stations, shops and other points, and members are invited to send to the officers criticisms of any case where they may consider that benefits were not justly made. This seems a very effective check on fraud.

The Automatic Freight Car Brake.

The American Brake Co. in St. Louis announces that the price of its automatic freight car brake is \$15 per set. To all companies contracting for this brake for their entire freight equipment before June 30, 1884, a discount of 20 per cent. will be allowed, and on all contracts made between July 1 and Dec. 31, 1884, an allowance of 10 per cent.

The price of the locomotive driver brake will be continued at \$150 per set for the horizontal cylinder pattern, and \$175 for the vertical. These brakes are now in use on over 1,200 cars and a number of engines.

The Accident Near Berlin.

European papers just received give the following details of the recent railroad disaster at Steglitz, a village about three miles from Berlin, Germany, on the Potsdam-Magdeburg-Cologne Railway line:

The fine Sunday weather had tempted to the place, as to all other suburban resorts, crowds of pleasure-seekers of the poorer class, including some patriotic societies, to celebrate the anniversary of Sedan. At the close of the day the station was besieged by several hundreds of the excursionists, eager to get home by the first train from Potsdam. The station at Steglitz is furnished with insufficient waiting accommodation, and passengers going to Berlin have to cross the rails in order to enter the up trains. Until the up trains arrive, it is usual to detain Berlin-bound passengers on down the platform, by means of a movable barrier, such as is used at most crossings; and behind this barrier last night, toward ten o'clock, an impatient crowd of 200 or 300 people were waiting for the train that was to take them home to Berlin. The train arrived, and, eager to secure seats, the excursionists either burst, or jumped, or pushed back the barrier-poles, and began to stream across the rails like a flock of sheep. This they did

in spite of the shouts, remonstrances and lantern waving of the railway officials—of whom, however, it is said that there was an altogether insufficient number—who saw, to their horror, that the Cologne express from Berlin was tearing down upon the station at the rate of a kilometre per minute. There was one heartrending and unanimous shriek which silenced even the thunder of the approaching wheels, the heavy engine dashed in among the wedged and struggling mass, and in another instant the line was strewn with the horribly mutilated and dismembered bodies of some 40 human beings.

For a distance of 100 yards the line was covered with bodies, all shockingly mutilated, and human fragments. Of one family of five persons only one boy escaped. The killed include four married couples, five members of the Shooters' Company, with the flagbearer and three artillery corporals. One of the latter had both legs and his heavy sabre cut through as with a knife. One girl had nearly reached the local train when the draft caused by the express threw her under the locomotive. One woman had both legs cut off, and on being carried into the waiting-room gave birth to a dead child and expired. Another woman and a sailor in the Imperial Navy were completely decapitated, and no vestiges of the heads have been found. A child had one hand cut off, and one body was entirely divested of clothing.

The driver of the express train had to be relieved, being unable to proceed after witnessing the scene of carnage. His locomotive was covered with pieces of flesh, bones, rags, and drenched with blood. The line remained blocked for hours, while detachments of firemen and soldiers gathered the remains of the victims by torchlight.

Eight Clerks to make the Freight Receipt.

A correspondent of the *Indian Railway Service Gazette* says:

"I had occasion the other day to book goods from the goods shed at Madras. And I had to go to eight clerks before I finished with my work. Surely this, I should think, was quite unnecessary and useless, as all this work could have been done by two men instead of eight. Each of these eight men had only to write a few words, and some a few figures, and the eighth or last man had merely to sign his name to the receipt, which took seven men to make out. All these clerks, I presume, are in receipt of monthly salaries for doing but very little, according to what I have seen done on that day with my goods. Is this one of the many reasons why the Madras Railway does not pay? I am certain that it does not take eight clerks to book a box or bundle of goods on any other line in India save the Madras Railway."

Narrow-Gauge Houses.

A correspondent of the *Indian Railway Service Gazette*, complains bitterly of an advance in the rents of the "bungalows" provided for dwellings of employes of the Rajputana State Railway. For quarters which consist, he says, of two small rooms and three ill-constructed, rickety out-offices, the employes are to pay 20% rupees per month (about \$9.55), while some of them only receive 60 rupees (\$27.73) per month. Moreover, it is altogether out of proportion to the rents charged the officers of the railroads. These, receiving from \$231 to \$277 per month, are supplied with dwellings having nearly three times as much room and a large number of out-offices and stabling for 35 rupees (\$18) per month. The bungalows, he says, are not nearly so well built or commodious as those on the East Indian Railway, and the rents are nearly twice as great as they need to be. On this the *Railway Service Gazette* comments as follows:

"We have seen the bungalows provided for the men upon the Rajputana State Railway. They are certainly much smaller in every respect than those provided by the East Indian Railway for their employes; but then that line is broad gauge, whereas the State line is narrow gauge, and during its construction orders were given that everything was to be constructed in proportion: in short, everything on and about the railway, including the line itself, was to be metre gauge. The scheme evolved from men with metre brains, and we only wonder that they stopped short of obtaining metre-gauge parents with metre-gauge children to occupy the metre-gauge bungalows they provided. We do not know who may be directly responsible for the unjust order to increase the rents of these bungalows, but whoever he may be, he cannot be the fortunate possessor of broad-gauge ideas. To compel men to reside in dwellings, the rooms of which are barely large enough to swing a cat around in, and make them pay double the rent they would be asked for similar accommodations elsewhere, may be a suggestion of the Finance Minister, who wants to present a pleasing budget; but that does not lessen the injustice of the proceeding. Apart from the disproportion between the rent charged to officials, and the present rates debited to employes, which is sufficiently great to arrest attention and prove that the men have a solid grievance, there is the greater injustice which demands from men drawing various rates of salary the same rate of house rent."

General Railroad News

MEETINGS AND ANNOUNCEMENTS.

Meetings.

Meetings will be held as follows:
Cumberland Valley, annual meeting, in Harrisburg, Pa., Oct. 1.

Evansville & Terre Haute, annual meeting, at the office in Evansville, Ind., Oct. 16 at 11 a. m. Transfer books close Oct. 5.

Dividends.

Dividends have been declared as follows:
Chicago, Rock Island & Pacific, 1% per cent., quarterly, payable Nov. 1. Transfer books close Sept. 29.

Chicago, St. Paul, Minneapolis & Omaha, 1% per cent., quarterly, on the preferred stock, payable Oct. 20. Transfer books close Sept. 29.

Dubuque & Sioux City (leased to Illinois Central), 3 per cent., semi-annual, payable Oct. 15. Transfer books close Sept. 29.

Lake Shore & Michigan Southern, 2 per cent., quarterly, payable Nov. 1. Transfer books close Oct. 2.

Manhattan, 1% per cent., quarterly, on the first-preferred stock, payable Oct. 1 to stockholders of record Sept. 25, "provided the legal restraint prohibiting such payment is removed."

Railroad and Technical Conventions.

The American Street Railway Association will hold its next meeting in Chicago, Oct. 9.

The American Institute of Mining Engineers will hold its autumn meeting in Troy, N. Y., during the second week in October.

The New England Railroad Club will hold its regular monthly meeting at its rooms in the Boston & Albany passenger station in Boston, Oct. 10, at 7:30 p. m. All interested in railroad matters are invited to attend.

The General Time Convention will hold its fall meeting at the Grand Pacific Hotel in Chicago, Oct. 11.

The Southern Railway & Steamship Association will hold its ninth annual convention in Atlanta, Ga., Oct. 17.

The Southern Time Convention will hold its fall meeting at No. 46 Bond street, New York, Oct. 17.

The American Association of Railroad Superintendents will hold its fall meeting in Washington, Oct. 23.

The American Society of Mechanical Engineers will hold its annual meeting in New York, in the week ending Nov. 3.

Foreclosure Sales.

The property of the Washington, Cincinnati & St. Louis Co. was sold Sept. 25 at public sale, and bought for \$40,000 by Joseph S. Loose, of Bridgewater, Va., who is said to represent the creditors. The line in Virginia as projected was from Washington by Harrisonburg, Va., and Bridgewater to the West Virginia line near Monterey. No part of the road was ever built, and the property consists chiefly of the franchises and some right of way.

The Philadelphia & Atlantic City road was sold in Camden, N. J., Sept. 20, under a decree of the Court of Chancery, and was bought for \$100,000 by Mr. George B. Kaercher, who, it is understood, represents the Philadelphia & Reading Co. In addition to the money paid, the purchaser assumes the payment of the Receiver's debts and liabilities. The road extends from Camden to Atlantic City, 55 miles, and had a funded and floating debt of about \$550,000. A new company will be organized at once, and the road will be put in good repair and changed from 3 ft. 6 in. to standard gauge.

Mail Service Extensions.

Mail service has been ordered over new railroad lines as follows:

New York, West Shore & Buffalo, service ordered from New York to Albany, to begin Oct. 1.

Joint Executive Committee Passenger Meeting.

A meeting of the Joint Executive Committee, Passenger Department, was held at the Commissioner's office in New York Sept. 25. The principal business on the first day was the adoption of a new pooling agreement in place of the one which expired Aug. 31. The new agreement is substantially the same as the old one, and is to continue only until Jan. 1.

The Chicago & Atlantic and the Chicago, St. Louis & Pittsburgh roads were admitted as members of the Committee.

Some changes in differential fares are to be considered before the meeting adjourns.

New York Railroad Commission.

The New York Railroad Commissioners met in New York Sept. 25 to hear complaints made as to excessive charges for commutation and local freights on the New York & Harlem line. A number of witnesses were heard, but no decision was made.

American Street Railway Association.

Mr. W. J. Richardson, of Brooklyn, N. Y., Secretary of this Association, has issued the following circular:

"The regular annual meeting of the American Street Railway Association will be held at the Grand Pacific Hotel in Chicago, Ill., the second Tuesday in October (the 9th), 1883, at 10 o'clock a. m.

"Papers will be read and discussed on the following subjects: 'Construction of Track'; 'Propelling Power'; 'Buildings'; 'Labor and Wages'; 'Collection of Fares'; 'Removing Snow and Ice'; 'Horseshoeing'; and 'Heating and Lighting.'"

New England Road-Masters' Association.

The first annual meeting of this Association was held at Young's Hotel in Boston, Sept. 20. There were 20 members present and 16 new members were admitted during the meeting.

After the preliminary routine business had been transacted officers for the ensuing year were elected.

After the election of officers a general discussion was had, no special papers having been prepared, on "Frogs—best for main and side tracks." "Switches—best for main and side tracks." "Elevation of curves—outer rail elevated, or inner rail depressed; maximum limit of length; reversed curves." "Railroad ties—timber; thickness; position on curves." "Ballast—best for ties and rails; prevent heaving of track." "Joints—best for 60' and 70' pound rail."

Southern Railway & Steamship Association.

Notice is given that the Ninth Annual Convention of the Southern Railway & Steamship Association will be held at the office of the Association, in Atlanta, Ga., on Wednesday, Oct. 17, 1883.

Transportation companies, members of or working with the Association, are invited to send duly authorized representatives, as per Third Article of Agreement Jan. 17, 1883. The Convention will be called to order at noon.

Master Car-Painters' Association.

A report of the first day's proceedings of the Annual Convention of this Association appeared last week.

On the second day, Sept. 20, the meeting was called to order by the newly-elected President, Mr. John Rattenbury.

The reports of the President and Secretary were read and approved, showing the Association to be in a flourishing condition, with a good financial basis and a present membership of 110 master painters from all parts of the United States.

The meeting was chiefly devoted to the reading of papers on the subjects noted last week, and to general discussion and criticism of the papers.

The usual routine business was transacted, and a committee was appointed to prepare subjects for discussion for the next annual meeting.

It was resolved to hold the next convention in Boston on the first Wednesday in September, 1884. The convention then adjourned.

In the afternoon the members of the Association were taken in carriages to visit the parks and other places of interest in the city. On the following day, Sept. 21, they went in a body to Washington, where a banquet was given in their honor by a number of the leading paint and varnish firms of the country.

General Baggage Agents' Association.

The semi-annual meeting of this Association was held at the Tremont House, Chicago, Sept. 20. The following members were present:

J. Van Smith, Baltimore & Ohio, President; J. L. Freeman, Lake Shore, Vice-President; M. B. Starring, Chicago, Burlington & Quincy, Secretary; F. J. McWade, Pennsylvania; H. P. Dearing, Michigan Central; C. Huntington, Chicago & Alton; J. D. Marston, Chicago, Rock Island & Pacific; N. A. Phillips, Chicago & Northwestern; D. M. Christie, Chicago, Milwaukee & St. Paul; J. E. Quick, Chicago & Grand Trunk; J. P. Cox, Cincinnati, Hamilton & Dayton; D. M. Calkins, Cleveland, Columbus, Cincinnati & Indianapolis; C. S. Pease, Delaware & Hudson Canal Co.; L. H. Pines, Flint & Pere Marquette; Robert Adair, Hous-

ton & Texas Central; H. A. Winter, Illinois Central; G. S. Venn, Indianapolis Union; F. H. Allen, Kansas City, St. Joe & Council Bluffs; R. R. Bentley, Pittsburgh, Fort Wayne & Chicago; J. J. Post, New York, Lake Erie & Western; W. I. Robinson, Ohio & Mississippi; M. Simons, Farmelee Transfer Co.; S. E. Dana, St. Paul, Minneapolis & Manitoba; Henry Starring, Chicago & Iowa.

The first day was devoted chiefly to the exchange of lists of unclaimed baggage and other routine work.

There was an informal discussion on claims for damages for baggage lost or stolen.

On the second day the question of immigrant baggage was discussed, and a resolution was passed requesting the General Passenger Agents' Association to limit the weight of immigrant baggage to 250 lbs. for one piece, as is the rule with that of first-class passengers. There was also a long discussion on the question of baggage checks.

It was decided to hold the next meeting in St. Louis on the third Wednesday of February next.

ELECTIONS AND APPOINTMENTS.

Chicago, Burlington & Kansas City.—Mr. M. B. Starring has been appointed General Baggage Agent, with office in Keokuk, Iowa.

Chicago, Burlington & Quincy.—Mr. Alexander Forsyth has been appointed Master Mechanic of the St. Louis Division. He was recently General Foreman of the Beardstown shops.

Cincinnati, Indianapolis, St. Louis & Chicago.—Mr. C. W. Norris has been appointed Traveling Passenger Agent, with headquarters at No. 121 Randolph street, Chicago.

Cincinnati, New Orleans & Texas Pacific.—Mr. D. Ennis has been appointed General Baggage Agent of all the lines controlled by this company, with office in Cincinnati.

Mr. W. W. Wells has been appointed Superintendent of the Cincinnati Southern Division, with office at Somerset, Ky. Mr. Z. Jones has been appointed Master of Transportation of the Cincinnati Southern Division and Mr. J. E. Willis Chief Train-Dispatcher, with offices at Somerset, Ky. The office of train-master on this division is abolished.

Mr. D. H. Pardon has been appointed Master of Transportation of the Alabama Great Southern, the Vicksburg & Meridian and the New Orleans & Northwestern divisions, with office at Meridian, Miss. Mr. T. I. Hewlett is appointed Train-Master of the Alabama Great Southern Division, with office at Birmingham, Ala.

Mr. I. S. Williams is appointed Superintendent of the New Orleans & Northeastern Division, with office in New Orleans.

Columbus, Hocking Valley & Toledo.—Mr. W. N. Colt has been appointed Treasurer in place of F. H. Medary, deceased. Mr. W. S. Pickering has been appointed Paymaster.

Denver & Rio Grande.—The board has elected Mr. Frederick Lovejoy President in place of W. J. Palmer, resigned. Mr. Lovejoy is a resident of Philadelphia, and was formerly General Manager of the Adams Express Co.; in that position he earned a reputation for energy and executive ability. He is a large stockholder in the company.

East Tennessee, Virginia & Georgia.—The board has chosen Messrs. George F. Baker, John T. Martin and George S. Scott, all of New York, directors to fill vacancies in the board.

Fitchburg.—Mr. Amos H. Brown has been appointed Depot Master in Boston and General Baggage Agent. Mr. Brown has been a conductor on the road for 20 years.

Mexican Central.—Mr. James Harrington has been appointed Superintendent of the Road Department in place of G. M. Thompson, who retires on account of ill health. Mr. Harrington was formerly Chief Engineer of the Tampico Line, but was recently appointed Assistant to the General Manager.

New England Road-Masters' Association.—At the annual meeting in Boston, last week, the following officers were chosen: President R. Hyland, Cheshire Railroad; Vice-President, A. C. Bean, Central Vermont; Secretary, W. F. Ellis, Providence & Worcester; Treasurer, P. A. Eaton, Concord Railroad; Executive Committee, J. W. Shanks, New London Northern, J. R. Patch, Connecticut River, and J. S. Lane, New York, New Haven & Hartford.

New Hampshire Railroad Commission.—The Governor and Council of New Hampshire have appointed as Railroad Commissioners under the new law O. C. Moore, of Nashua, E. B. Sanborn, of Franklin, and E. J. Tenney, of Claremont.

Mr. Tenney is a shoe manufacturer and was a Railroad Commissioner under the old law; Mr. Sanborn is a lawyer of high standing in the state, and Mr. Moore is editor of the *Nashua Daily Telegraph*, and takes a prominent part in state politics.

New York & Long Branch.—Mr. Albert Chadwick, of Red Bank, N. J., has been appointed Paymaster.

Northern Pacific.—At the annual meeting in New York, Sept. 20, the following directors were chosen: Frederick Billings, Woodstock, Vt.; Benjamin P. Cheney, J. L. Stackpole, Boston; Henry E. Johnston, Baltimore; J. C. Bullitt, Philadelphia; Ashbel H. Barney, August Belmont, John W. Ellis, Robert Harris, J. Pierpont Morgan, Thomas F. Oakes, Roswell P. Rolston, Henry Villard, New York. There is no change from last year.

Pennsylvania.—Mr. Michael Trump has been appointed Assistant Superintendent of the Pittsburgh division.

Mr. Samuel Rhea has been appointed Principal Assistant Engineer and assigned to duty in the office of the Third Vice-President.

Mr. A. P. Gest has been appointed Assistant Engineer of the Pittsburgh Division. Mr. John Brotherton has been appointed Assistant Engineer of the Monongahela Division.

Peoria, Decatur & Evansville.—Mr. George N. Wells has been appointed General Traveling Agent, with headquarters in Evansville, Indiana.

Pittsburgh, Fort Wayne & Chicago Railway Mutual Benefit Association.—At the annual meeting in Erie, Pa., Sept. 18, officers were elected as follows: President, H. W. Wynkoop, Crestline, O.; First Vice-President, J. E. Welden, Chicago; Second Vice-President, O. E. Bradway, Fort Wayne; Third Vice-President, W. F. Ross, Allegheny; General Secretary, I. M. Layng, Crestline; Treasurer, J. J. Kirkland, Crestline; Executive Committee, J. K. McCracken, Fort Wayne; W. A. Strong, Alliance; I. Diefendorfer, Dunkirk, O.; James Rogers, New Brighton, Pa.; J. E. Goodyear, Worcester, O.; Auditing Committee, D. L. Zink, Crestline; Geo. H. McClane, Chicago, and J. N. Wertz, Crestline.

Pittsburgh Junction.—Mr. Thomas M. King has been chosen President in place of E. K. Hyndman, resigned. Mr. King is Superintendent of the Pittsburgh Division of the Baltimore and Ohio road.

Port Royal & Augusta.—The jurisdiction of Messrs. J. N. Bass, Superintendent; Edward McIntyre, Treasurer; W. F. Shellman, Traffic Manager; and J. S. Davant, General Freight and Passenger Agent, is extended over the Augusta & Knoxville road, recently leased.

Richmond & Allegheny.—Mr. G. W. Agee having resigned, the office of Superintendent is abolished. Reports and communications heretofore sent to that office will hereafter be sent to Mr. Decatur Axtell, Receiver and Manager.

Road-Masters' Association of America.—At the convention in St. Paul, Minn., last week, the following officers were elected: President, I. Burnett, Chicago, Rock Island & Pacific; Joliet, Ill.; First Vice-President, John Brennan, St. Paul, Minn.; Second Vice-President, John Brennan, St. Paul, Minn.; Secretary, C. R. Meeker, Chicago, Burlington & Quincy; Treasurer, Thomas Adams, Ohio & Mississippi; Member Executive Committee for three years, S. L. Sweeney, Wabash, St. Louis & Pacific Railroad, Beament, Ill.

St. Louis, Keokuk & Northwestern.—Mr. M. B. Starring has been appointed General Baggage Agent, with office at Keokuk, Iowa.

South Pacific Coast.—Mr. George Revett is appointed General Superintendent in place of A. H. Fracker, resigned. Mr. Revett was formerly Private Secretary to the President of the Chicago, Rock Island & Pacific Co. in Chicago.

Staten Island Rapid Transit.—Mr. J. Frank Emmons has been chosen President in place of Adolph L. King, resigned.

Western & Atlantic.—Mr. C. E. Harman has been appointed General Southern Agent. He has been connected with the road for several years. Mr. Wm. H. Trezevant succeeds Mr. Harman as Southeastern Agent.

PERSONAL.

—Mr. G. W. Agee has resigned his position as superintendent of the Richmond & Allegheny road.

—Mr. Wm. B. Strong denies a report that he has resigned his position as President of the Atchison, Topeka & Santa Fe Railroad Co. He further says that he has no intention of resigning.

—Mr. George H. Poor, Master Mechanic of the Portland & Ogdensburg Railroad, has resigned that office to accept the position of Mechanical Superintendent of the American Brake Co. in St. Louis.

—Mr. A. H. Fracker has resigned his position as General Superintendent of the South Pacific Coast road, to date from Oct. 1. He has been on the road for several years and was previously Master of Transportation of the North Pennsylvania road.

—Wm. A. Norton, Professor of Civil Engineering in the Sheffield Scientific School of Yale College, a position which he had occupied for a great many years, died Sept. 1 aged 72. Professor Norton was a graduate of West Point and was eminent for his scientific acquirement and research, chiefly in the field of physics.

—Mr. Samuel Eben Barnay, for four years past an Assistant Engineer on the Northern Pacific road, has been selected as Acting Professor in the Sheffield Scientific School of Yale College in place of the late Professor Norton. Mr. Barnay graduated from the college in 1879, and has been on the Northern Pacific road ever since.

—Mr. John D. McDonald, a railroad contractor, of Thorold, Ont., died at Ashburn, Ont., Sept. 20, after an illness of only two days. At the time of his death he was engaged on a contract on the Ontario & Quebec road, now approaching completion. Mr. McDonald had held contracts on many roads, and was well known both in Canada and the United States.

—Mr. E. K. Hyndman has resigned his position as President of the Pittsburgh Junction Railroad Co. He will rest entirely for a time, in the hope of recovering his health, and will then devote his time to the development of some mineral lands which he owns in Tennessee. Mr. Hyndman was for a long time General Superintendent of the Pittsburgh & Connellsville road, and afterwards General Manager of the Pittsburgh & Western, resigning the latter position a few months ago.

—Mr. E. B. Westfall having recently been promoted from the Superintendency of the Middle Division to that of the Eastern Division of the Philadelphia & Erie Division, Pennsylvania Railroad, the employees of the Middle Division and the Kenosha shops testified their friendship for him by presenting him with a horse and carriage and all the necessary outfit, and also a sleigh for winter use. The presentation was made at Mr. Westfall's residence and was acknowledged by him in appropriate terms.

TRAFFIC AND EARNINGS.

Coal.

Coal tonnages for the week ending Sept. 15 are reported as follows:

	1883.	1882.	Inc. or Dec.	P. c.
Anthracite.....	737,585	732,481	I. 5,104	0.7
Semi-bituminous.....	117,041	111,903	I. 5,138	4.6
Bituminous, Penna.....	56,359	61,514	D. 5,155	8.4
Coke, Penna.....	61,426	49,184	I. 12,242	24.9

An increased demand for anthracite coal is reported, with a firmer market resulting. The demand is chiefly for domestic consumption, as usual at this season.

Cumberland shipments continue very large, and this week are considerably in excess of the Clearfield tonnage.

The coal tonnage of the Pennsylvania Railroad for the week ending Sept. 15 was as follows:

	Coal.	Coke.	Total.
From line of road.....	113,719	49,287	163,006
From other lines.....	60,411	12,130	72,570
Total.....	174,150	61,420	235,576

The total tonnage this year to Sept. 15 was 8,390,594 tons, as compared with 7,750,182 tons to the corresponding date in 1882; an increase this year of 640,402, or 8.3 per cent.

Cumberland coal shipments for the week ending Sept. 22 were 59,148 tons. The total shipments this year to Sept. 22 were 1,797,183 tons, against 820,595 tons to the corresponding date last year, showing an increase of 976,588 tons, or 119.0 per cent.

Conference of Pacific Roads.

A meeting began in San Francisco Sept. 20, at which the following lines were represented: Central and Southern Pacific; Galveston, Harrisburg & San Antonio; Union Pacific; Atchison, Topeka & Santa Fe; Northern Pacific;

Texas & Pacific; Denver & Rio Grande; Atlantic & Pacific. The Vice-President of the Chicago, Burlington & Quincy road was also present.

It was stated that the object of the conference was the conclusion of an agreement for division of business and for maintaining rates. The proceedings are kept secret.

A committee of freight managers was appointed to prepare a plan for pooling and division of traffic.

On Sept. 25 the conference was still in session, but nothing had been done and no agreement reached.

Railroad Earnings.

Earnings for various periods are reported as follows:

	1883.	1882.	Inc. or Dec.	P. c.
Eight months ending Aug. 31:				
Cin. Wash. & Bal.	\$1,178,082	\$1,073,015	I.	105,067 9.8
D. M. & Ft. Dodge.	198,410	223,808	D.	25,430 13.3
Northern Cent.	4,006,410	3,398,215	I.	308,195 8.3
Net earnings.....	1,524,394	1,353,021	I.	175,473 12.9
Pennsylvania.....	33,254,913	31,471,178	I.	1,787,735 5.7
Net earnings.....	12,153,987	11,809,879	I.	284,108 2.4
South Carolina.....	794,164	726,607	I.	67,557 9.3

	1883.	1882.	Inc. or Dec.	P. c.
Six months ending June 30:				
Cin. Wash. & Bal.	\$2,004,496	\$1,872,649	I.	\$131,847 7.0
Net earnings.....	559,719	437,780	I.	118,939 27.2
N.Y. & L. Erie & W.	10,167,493	9,300,613	I.	866,880 9.3
Net earnings.....	2,701,141	2,055,411	D.	104,770 6.5

	1883.	1882.	Inc. or Dec.	P. c.
Month of June:				
N.Y. & L. Erie & W.	2,057,547	1,756,934	I.	300,613 17.1
Net earnings.....	615,722	685,892	D.	70,140 10.2

	1883.	1882.	Inc. or Dec.	P. c.
Month of July:				
Cin. Wash. & Bal.	\$45,164	\$30,850	I.	\$14,314 46.3
Net earnings.....	9,100	3,226	I.	5,874 182.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of August:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of September:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of October:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of November:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of December:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of January:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of February:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of March:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of April:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of May:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of June:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of July:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of August:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of September:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of October:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of November:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of December:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
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Month of March:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of April:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of May:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of June:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of July:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of August:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of September:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of October:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of November:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of December:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of January:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of February:				
Buf. N. Y. & Phil.	\$265,000	\$232,763	I.	\$32,237 13.8
Net earnings.....	145,000	118,859	I.	26,141 25.1

	1883.	1882.	Inc. or Dec.	P. c.
Month of March:				
Cin. Wash. & Bal.	\$182,000	\$203,078	D.	\$21,078 10.4
Net earnings.....	11,406	28,242	D.	8,553 30.0

	1883.	1882.	Inc. or Dec.	P. c.
Month of April:				

the Eastern and the Maine Central are largely identical, and the present executive management of the two roads is the same and is deservedly popular. Hence there is a feeling, it is said, that a change in the management would be detrimental to Maine Central interests, and that its stockholders could not expect from the Boston & Maine such advantages as they now possess. What may be the outcome of the pending negotiations between the directors of the Maine Central and those of the Boston & Maine there is no opportunity of judging, but it seems likely that some concessions will be made to the former road.

Buffalo, New York & Philadelphia.—This company makes the following statement for the month of August:

	1883.	1882.	Increase.	P. C.
Earnings.....	\$295,070	\$322,763	\$27,693	13.8
Expenses.....	120,400	116,904	3,496	3.6
Net earnings.....	\$174,670	\$205,859	\$31,189	25.1

The earnings and expenses for the month this year are partly estimated. The proportion of expenses to earnings is unusually small.

Canadian Pacific.—Track on the main line of this road is now laid for 35 miles westward from the late terminus at Calgary, and within 25 miles of Padmour, which is at the entrance of the pass through which the road will cross the Rocky Mountains. The grading is completed for 55 miles beyond Padmour, leaving only 6 miles to reach the summit of the pass.

Cannelton.—This company has been organized to build a railroad from Cannelton in Kanawha County, W. Va., to a point on the lands of the Cannelton Coal Co., near Bell Creek. It will be a short coal road.

Carolina, Cumberland Gap & Chicago.—A survey for this road is now in progress, and the engineers, starting at Aiken, S. C., have reached Eastatoe Gap.

Central Iowa.—A large transfer steamer has been put in use on the ferry across the Mississippi River between Keithsburg, Ill., and West Keithsburg, Ia. The steamer will be used to transfer cars across the river, completing the connection between the Illinois and Iowa divisions of the road.

Central, of New Jersey.—The Dinsmore suit to set aside the lease of this road to the Philadelphia & Reading Co. came up before the United States Circuit Court at Trenton, N. J., Sept. 25. A motion for the appointment of an examiner to take testimony in relation to charges of bad faith on the part of the plaintiff was denied, and the case was set over to Oct. 26, to give time for filing answers to the complaint.

Chicago, Milwaukee & St. Paul.—This company's James River Branch is now opened for traffic to Wolsey, Dak., 41 miles southward from the late terminus at Ashton, 78 miles from the junction with the Hastings & Dakota Division at Aberdeen, and 111 miles from the northern end of the branch at Ellendale. About 34 miles of track, from Wolsey to Letcher, remains to be laid to complete this branch southward to the Iowa & Dakota Division at Mitchell, 160 miles from Ellendale.

The Okoboji Branch has been extended from its late terminus at Lake Okoboji, Ia., northward to Spirit Lake, 7 miles beyond Okoboji, and 24 miles from the junction with the Iowa & Dakota Division at Spencer. Regular trains will run to Spirit Lake in a few days.

Work has been begun on the extension of the Chippewa Valley Division from Eau Claire, Wis., northwest to Chippewa Falls, about 11 miles. The object of this extension is to secure a share of the traffic of the large lumber mills at Chippewa Falls.

Cleveland, Columbus, Cincinnati & Indianapolis.—The following statement for the half year ending June 30 is published in London:

	1883.	1882.	Increase.	P. C.
Earnings.....	\$2,004,496	\$1,872,649	\$131,847	7.0
Expenses.....	1,447,757	1,436,269	11,488	0.8
Net earnings.....	\$556,739	\$436,380	\$120,359	27.6
Fixed charges.....	323,796	320,905	2,891	0.9
Surplus.....	\$232,943	\$115,475	\$117,468	101.8

The expenses were 72.22 per cent. of gross earnings this year, against 76.64 per cent. last year.

Expenditures for additions to property in the half-year of 1883 were \$191,412, leaving a balance of \$41,532 to credit of income.

Columbus, Hope & Greensburg.—The track on this road is now laid from the junction with the Cincinnati, Indianapolis, St. Louis & Chicago road at Greensburg, Ind., westward to Hope, 17 miles, and the first train was to run to Hope on Sept. 27. From Hope southwest to Columbus, 11 miles, the grading is well advanced, and work is being pushed as fast as possible.

Concord.—The Boston Advertiser of Sept. 22 says: "Regarding the prospects for the consolidation of the several railroads wholly or in part located in New Hampshire, to facilitate which the recent passage of the Colby general railroad bill was secured, there seems to be some divergence of opinion. It has been asserted by the friends of the bill that the several interests involved were substantially unanimous in favor of consolidation, and so soon as legislative sanction should be secured they would speedily perfect the union of the lines. But recent advices from persons well informed as to railway affairs in New Hampshire are to the effect that the Concord, the Northern, and the Boston, Concord & Montreal are far from harmonious, and that there is likely to be a long period of negotiation before they will arrive at a satisfactory basis of amalgamation. The fact is said by these gentlemen to be that the larger surplus of the Concord Railroad and its immense earnings are the 'melon' which the managers of the other two roads are desirous of having cut, and that the question of the division of the aforesaid melon and the distribution of the slices is likely to cause considerable pulling and hauling. There is talk of an appeal to the Supreme Court to prevent any such distribution of the Concord's wealth as is said to be contemplated."

Denver & New Orleans.—A public auction sale of securities of the Denver & New Orleans Railroad Co., occurred at the office of the Mercantile Trust Co., in New York, Sept. 19. The Trust Co. held as collaterals for money loaned 2,286 of the first mortgage bonds, and 25,400 shares of the stock of the railroad company. The par value of the bonds was \$1,000. The sale was made in consequence of a default of payment of certain promissory notes which had been given to the Mercantile Trust Co., by the Denver & New Orleans Railroad Co. The amount of the Trust Company's claim was something over \$1,500,000, and the securities which were offered were bid in by Mr. J. S. Brown of Denver, for \$1,592,000. The sale was attended by a large number of gentlemen interested in the Denver & New Orleans, including President Evans. The purchase by Mr. Brown is supposed to be in the interest of the company.

It is reported that this road has been sold to Eastern parties, who will extend it from Pueblo, Col., to the coal dis-

tricts about Cañon City and also to the coal mines at Trinidad.

Denver, Utah & Pacific.—A dispatch from Denver, Col., says that this road has been sold, but no particulars of the sale have been made public.

Detroit, Bay City & Alpena.—Surveys are being made for this road from East Tawas, Mich., to An Sable, about 14 miles. Work on the grading has been begun at East Tawas, with the expectation of finishing this section of the road this year.

Florida Ship Canal.—At a recent meeting the directors were authorized to make a contract for the construction of the proposed canal, and to begin work as soon as possible. The canal will start near the mouth of the St. Johns River, and its length, according to the survey, will be 136 miles. It is proposed to make the canal 30 ft. deep and 230 ft. wide.

Florida Southern.—On the extension of the main line of this road track is now laid to Hague, Fla., 11 miles northward from the late terminus at Gainesville and 60 miles from the St. Johns River at Palatka. Work is progressing on the line from Hague to Newnansville, 5 miles.

Georgetown & Lanes.—This road, which is to extend from Georgetown, S. C., westward to Lanes, a station on the Northeastern road and the eastern terminus of the South Carolina Central, is now completed for 20 miles from Georgetown, and trains are running on the completed section. The remaining 17 miles are all graded and the crossings laid ready for the rails, which are being furnished by the Bethlehem Iron Co. The work on this road was begun in December last, when the entire contract to build and equip the road was let to Mr. A. J. Twigg, of Augusta, Ga. There are now 50 freight cars on the road, which were built in Georgetown; they are all standard cars of 20 tons capacity. It is expected that the rest of the track will be laid and the road turned over to the company by Nov. 1 next.

Grand Trunk.—An agreement has been concluded between this company and the city of Montreal, under which the city is to surrender its claim for the repayment of the loan of \$600,000 made to the company 30 years ago, at the time the road was first built. The company, on its part, agrees to build a passenger station in the city to cost \$500,000. As security for the performance of the agreement, the company is to deposit \$100,000 with the Bank of Montreal as security, to be forfeited if the station is not completed within two years.

Hannibal & St. Joseph.—A fire broke out in the repair shops of this road at Hannibal, Mo., on the morning of Sept. 22, and the machine and blacksmith shops were entirely destroyed. The loss is estimated at \$50,000, and is partially covered by insurance.

Hartford & Harlem.—A new survey through the city of New Haven, Conn., and from New Haven westward has been begun, in consequence of the objections of the Connecticut Railroad Commission to the former location of the road.

International Bridge.—The Buffalo Express of Sept. 20 says: "On Tuesday morning a new step was taken in the long-pending International Bridge litigation. The Canada Southern has obtained from the United States Supreme Court in Washington a writ of alternative mandamus to compel the United States District Court for the Northern District of New York, to reopen the case relating to the terms upon which the railroad shall use the bridge. Mr. Daniel H. McMillan, attorney for the Canada Southern, yesterday served the writ from the Supreme Court upon Judge Cox, presiding at the United States District Court. A rehearing of the case is therefore to be had."

Kanawha & Coal River.—This company's road is now completed from the Chesapeake & Ohio road at a point 5 miles west of Charleston, W. Va., southward 15 miles up Davis Creek to the lands of the Black Band Iron & Coal Co. The road is intended to carry coal and iron ore to the Chesapeake & Ohio road, and also to a new blast furnace at the junction. The company intends to build an extension from the present terminus southward to Coal River.

Kansas City, Fort Scott & Gulf.—In order to provide the additional equipment required on the completion of its line to Memphis, an issue will be made of \$25,000 bonds of the Fort Scott Equipment Co., guaranteed by the Kansas City, Fort Scott & Gulf Railroad Co. These bonds will bear 6 per cent. interest, will have 10 years to run, and one-tenth of them will be payable each year at 105, either by purchase by the trustees, or by drawing by lot. The bonds are secured by mortgage on the equipment and by the agreement of this company to pay each year a rental equal to the interest and one-tenth of the principal. These bonds are now offered to stockholders of the Kansas City, Fort Scott & Gulf Co., each holder of record Sept. 20 to have the right until Oct. 8 to take them at 95, in the proportion of one \$1,000 bond for each 140 shares of common or preferred stock owned. Payment is to be made in installments as called for, no installment to exceed 25 per cent. of the principal.

Louisville, New Orleans & Texas.—A dispatch from Vicksburg, Miss., Sept. 18, says: "An injunction was served on Maj. J. M. Edwards to day as Vice-President and General Manager of the Vicksburg & Memphis, Mississippi Valley & Ship Island, Tennessee Southern and Grand Gulf & Port Gibson railroads, enjoining them from consolidation under the name of the Louisville, New Orleans & Texas Railroad. It is claimed in the bill of injunction filed in the Chancery Court of this county, that a contract was made in February, 1881, between R. T. Wilson of New York, E. Martin, George M. Klein, N. A. Harris, and Mrs. L. A. Campbell of this city and Mrs. Margaret Hunt of Boston that for and in consideration of certain property franchises, etc., the said R. T. Wilson was to issue stock and bonds to the plaintiffs to the amount of \$2,000,000, which the plaintiffs in the suit claim has not been done, hence the injunction. The injunction forbids the delivery of said bonds, franchises, etc., to any other parties except those named in the petition. The case will be heard in chancery at the November term."

Marietta & North Georgia.—The Georgia Legislature has approved the report of the investigating committee, and has passed the resolution giving this company the free use of 250 convicts until it is completed to the North Carolina line.

Mexican Railroad Notes.—The following notes are from the Mexican Financier of Sept. 1:

The Federal District Railway Co. is connecting the stations on its San Angel line by telephone. There have arrived at Monterey 950 tons of rails for the Matamoros & Monterey line of the Mexican National. The government inspector reported on Aug. 28 that 23 kilometers of track had been accepted, and 24 more had been finished, making 47 in service. Of grading, 90 kilometers had been finished. The present average of workmen employed was 820.

The northern line of the Mexican Central has reached Villa Lerdito. The southern end has crossed the Encarnacion bridge and track-laying is now progressing rapidly towards

Aguascalientes. The road is now in operation between Lagos and Encarnacion, a mixed train leaving Lagos at 7 in the morning and reaching Encarnacion at 10:40, leaving Encarnacion at 2:40 in the afternoon on the return, and reaching Lagos at 6:30. Aguascalientes is preparing to celebrate the arrival of the road at that point, and the state government has invited the other states of the republic to participate in the festivities.

The reports that work has been suspended in pushing the construction of the Mexican National prove to be incorrect. The work of construction is going on at both ends of the main line between here and the States. There has been some delay in reaching Ealtillo in consequence of bridge-building, but the capital of Coahuila will be able to hold its railway jubilee on the national independence day, Sept. 16. It is not likely that work southward will be suspended at that point in order to concentrate all forces on the completion of the Matamoros line, as has been reported from Laredo. The next important point to be reached on the line from this end, beyond Celaya, will be San Miguel de Allende, in the state of Guanajuato. S. Miguel is an important manufacturing city, with a population of something like 40,000.

Arrangements are now pending with the General Diligence management for the establishment of a stage-line between the two ends of the track of the Mexican Central. The Diligence management looks favorably upon the idea, and the line will probably be established as soon as the trains begin running to Aguascalientes, the stages running between that point and Villa Lerdito daily. There is at present a diligence line through Zacatecas to Durango by way of Sombretete. Perhaps the line for Lerdo may branch off from this route at Sombretete, or it may be found practicable to take a much shorter route to the eastward from Zacatecas, leaving out Sombretete. The time from Aguascalientes to Lerdo will probably be 5 days, but the trains will be running from here to Zacatecas before the end of the year, and as the northern end will be pushed southward well into Zacatecas by that time—reaching, in all probability, the town of San Juan de Guadalupe—the diligence journey will be shortened to two or three days, making the overland route by far the quickest way to the United States.

Minneapolis & St. Croix.—This company has filed articles of incorporation to build a railroad from Minneapolis, Minn., to the St. Croix River near Stillwater. It is to be the Minnesota section of the projected Minneapolis, Sault Ste. Marie & Atlantic road.

Mobile & Ohio.—This company announces that on Oct. 1 the local passenger fares over its lines will be reduced to 8 cents per mile. The rate heretofore has been 4 cents per mile.

New Brunswick.—This company is building repair shops at McAdam Junction, N. B., the crossing of its leased New Brunswick & Canada and St. John & Maine lines. The buildings in progress include a car shop, blacksmith shop, machine shop, boiler and engine house, storehouse and a number of dwellings for the men employed.

New Castle & Northern.—It is said that an agreement has been concluded under which this road will be completed as soon as possible and will be operated by the New York, Lake Erie & Western Co. when completed. The road will be 16 miles long, from Middlesex, Pa., on the Erie's leased New York, Pennsylvania & Ohio road, southward to New Castle, where connection will be made with the Pittsburgh & Western road to Pittsburgh. This would give the Erie a connection to Pittsburgh. The road is now under contract.

New Orleans & Northeastern.—The New Orleans Times-Democrat of Sept. 20 says: "Mr. George B. Nicholson, Engineer in charge of the construction of the Southern Division of the New Orleans & Northeastern road, arrived in the city yesterday from an inspection of the work on the lower end of the line. He informed the reporter that the south draw of the lake bridge will be swung into place within the next two weeks, and when this is done the track will be further advanced on the trestle. The first pier of the West Pearl River bridge is finished, and is ready for the erection of the draw span, which will be put in place in a few days. While the erection of the draw is in progress work on the remaining piers will be finished, which will then permit the building of the fixed spans. Over the East Pearl River a temporary trestle-work has been built, on which the track will be laid in order to avoid the delay of waiting until the iron spans are erected, the piers for which are very nearly completed. On Honey Island there are several small wooden trestles which are not yet completed, but which will be ready for the track by the time it reaches that locality. Mr. Nicholson states that every contractor who is slow or backward with his work is being pushed vigorously. He thinks that the track will reach the West Pearl River by Oct. 1, and that there is every reason to believe that the road will be completed to this city by Nov. 1."

New York & Boston Inland.—It is reported that this company has concluded a contract with Linn & McCarthy, of New York, for the construction of the road. The contractors, who are said to have held extensive contracts in Russia, are now inspecting the line of the road.

It is said from Boston that the contracting firm is not known there, and that its members are not generally supposed to have much financial strength. The firm is not known in New York.

New York, Lake Erie & Western.—This company makes the following statement for June and the nine months of its fiscal year from Oct. 1 to June 30, the figures including the earnings and expenses of leased lines:

	June.	—	Nine months.	—
	1883.	1882.	1882-83.	1881-82.
Earnings.....	\$2,057,547	\$1,756,684	\$15,496,701	\$14,402,156
Expenses.....	1,441,825	1,070,822	10,863,287	9,601,103
Net earn.....	\$615,722	\$685,862	\$4,633,415	\$4,801,053

For the nine months there was an increase of \$1,094,545 or 7.6 per cent., in gross earnings, with an increase of \$1,092,184, or 11.1 per cent., in expenses, the result being an increase of \$2,361, or 0.05 per cent., in net earnings.

New York & Long Branch.—The suit to enjoin this company from cancelling the contract under which its road is operated jointly by the New Jersey Central and the Pennsylvania Railroad companies came up in the United States Circuit Court in Trenton, N. J., Sept. 25. By agreement the case was put over in order to give time for the taking of testimony, the answers having all been filed and the case brought to an issue. It is probable that the hearing will not be had until the March term.

New York, West Shore & Buffalo.—Work is being pushed on the second track between Coeymans Junction and Syracuse, and it will be completed by Oct. 1, when trains begin to run to Syracuse, with the exception of one or two short gaps.

On the Buffalo end of the line track has been laid from

Akron, N. Y., eastward 20 miles, to a point a little over 40 miles from Buffalo. From Syracuse westward the track is laid for about 40 miles. Tracklaying is also in progress at several other points, and, if the present rate of progress can be kept up, it is thought that one track at least can be completed through to Buffalo by the end of the year.

It is said that arrangements have been made to place the \$12,000,000 first-mortgage bonds of the West Shore & Ontario Terminal Co., and that work will be pushed rapidly on the improvements of the terminal property at Weehawken.

Norfolk & Western.—A dispatch from Norfolk, Va., says that this company has filed for record in that city an agreement for the purchase of equipment to the amount of \$600,000 under a car-trust arrangement. The new equipment will include locomotives, passenger cars, box and coal cars.

Northern Central.—The Philadelphia Ledger of Sept. 24 says: "Among the improvements projected and that are being made at the present time, under the direction of Mr. George C. Wilkins, General Agent, the following may be noted: At Baltimore the bridges of the Union Railroad over Broadway, Gay street and the Philadelphia turnpike are to be replaced with other structures. These bridges will be hands-me, heavy, single span trusses, of the pattern used in the Pennsylvania system, in accordance with the policy to have the different lines equipped after the uniform manner which the Pennsylvania Railroad has found to be the most efficient. The Northern Central Railway is constructing a 200 ft. span iron truss bridge at Belvidere avenue, between Melvale and Mount Washington, Baltimore County. The Northern Central and Baltimore County jointly meet the cost of the bridge, which will be about \$22,000, but the company does the work. At Canton, in Baltimore, where the extensive shipping facilities of the road are located, several permanent improvements, which will cost over \$100,000, have just been put under contract. There the company has now two grain elevators, with a combined capacity for storage of 1,350,000 bushels and every modern convenience for handling grain and accommodations for the loading of vessels; a third elevator, which was recently destroyed by fire, will be rebuilt, and with enlarged capacity. The freight depot at Canton is 500 ft. in length by 70 ft., with storage facilities and transfer direct to vessels; and there are also bonded tobacco and coffee warehouses and coal wharves and accommodations for handling live stock for shipment, besides the numerous sidings in the freight yards. The most prominent of the projected improvements are the two new freight piers to be constructed: the first, which will be known as No. 4, is to be 500 ft. by 100 ft., with two tracks down the centre, and the width of the dock between it and the old pier No. 3 will be enlarged to 120 ft.; the second pier, No. 5, will be in length 500 ft. by 85 ft. in width, to accommodate three tracks, the width of the dock between it and pier No. 4 being 100 ft. Pier No. 3 is to be lengthened to 500 ft. by 120 ft., and there will be erected over it a shed inclosed in heavy corrugated iron and tin roofed. To afford better facilities and more room for a larger building on the present location of old pier 4, the pier is to be entirely removed. That the docks may be enlarged the bulkheads are to be torn out and rebuilt 100 feet further inland. They will all be of sufficient depth to accommodate the largest ocean steamers, and, when completed, there will be ample room for 12 steamers to load or discharge at once. About 2,000 feet of additional track have been added to the sidings in the freight yards, and the trackage will be further increased as needed. The Union passenger station at Baltimore, which has lately been remodeled and enlarged, is still inadequate to the needs of the public, and a new Union Depot, to be constructed on the present site, at a cost of about \$100,000 to \$125,000, is contemplated, and, it is said, will be the handsomest station in that city."

This company makes the following statement for August and the eight months ending Aug. 31:

	August.	Eight months.	1883.	1882.
Earnings.....	\$587,272	\$625,970	\$4,006,410	\$3,098,215
Working exp's.	288,121	274,356	2,215,398	2,141,476
Extraordinary expenses.....	18,940	19,968	256,618	197,818
Total.....	\$307,061	\$331,646	\$2,472,016	\$2,339,294
Net earnings.....	\$180,211	\$331,646	\$1,534,394	\$1,358,921

For the eight months there was an increase of \$308,195, or 8.3 per cent., in gross earnings. There was also an increase of \$73,922, or 3.4 per cent., in working expenses, and of \$53,800, or 60.1 per cent., in extraordinary expenses, making an increase of \$180,722, or 5.7 per cent., in total expenses; the result being an increase of \$175,473, or 12.9 per cent., in net earnings.

Northern Pacific.—The extension of the Pacific Division from Kalama, Wash., to Portland, Or., was completed last week, and regular trains will begin to run in a few days through from Portland to Tacoma on Puget Sound. This extension starts from Portland and runs northward up the west bank of the Willamette to its mouth, and thence up the west bank to the Columbia (which runs nearly due north for some 50 miles beyond the mouth of the Willamette) to Lenore, opposite Kalama. The length of the new line is 41 miles. Between Lenore and Kalama, across the Columbia River, the connection is made by a steam ferry, the transfer boats being of sufficient size to carry a train of cars across the river. The distances by this line from Portland to the Puget Sound terminus at New Tacoma, allowing two miles for the river transfer, is 148 miles.

In answer to a question as to whether the company would build the branch to Astoria, Oregon, provided contractors could be found to do the work for \$30,000 per mile, President Villard has replied that the Company will build the line if contractors will receive in payment for their work \$20,000 per mile in first-mortgage bonds and \$10,000 in second-mortgage bonds, as the Company has no other available means at present.

The Fargo & Southwestern Branch is now completed to Lamoure, Dak., 30 miles west by south from the late terminus at Lisbon, and 86 miles from the main line at Fargo.

It is reported that an issue of debenture bonds or second-mortgage bonds to the amount of \$15,000,000 will be made for the purpose of funding the floating debt. No action has yet been taken by the board, however, although it is said that something will be done at its next meeting.

Ohio River.—Tracklaying on this road was begun at Parkersburg, W. Va., Sept. 12. There are 90 miles of track to lay from Parkersburg to Benwood, four miles below Wheeling. The Ohio Valley Construction Co. is building the road, and the work is in charge of Mr. Wallace McGrath as Chief Engineer.

Ohio & Mississippi.—The London Committee of Stockholders has issued a notice requesting stockholders in the United States to unite with them at the coming annual meeting in electing three directors who will represent their interests, in order that the board may not be wholly controlled by the Baltimore & Ohio interest.

The Receiver makes the following statement to the Court for the month of August:

Cash on hand, Aug. 1.....	\$19,120
Receipts from all sources.....	546,826
Total.....	\$565,946
Disbursements.....	543,780

Cash on hand, Sept. 1.....\$22,166
The receipts exceeded the disbursements by \$3,046 for the month.

Pennsylvania.—A suit has been begun to enjoin this company from building the bridge over Toms River on its new branch to Island Heights, N. J. The plaintiffs do not object to the building of a bridge, but claim that the draw has only 37 ft. clear opening, according to the company's plans, and that it will obstruct the navigation of the river, unless a larger opening is provided.

This company makes the following statement for August, in which month, as compared with August, 1882, all its lines east of Pittsburgh and Erie show:

An increase in gross earnings of.....	\$104,201
A decrease in expenses of.....	5,561
Net increase.....	\$109,762

For the eight months ending Aug. 31, as compared with the corresponding period last year, the same line shows:

An increase in gross earnings of.....	\$1,787,734
An increase in expenses of.....	1,503,626
Net increase.....	\$284,108

With the earnings fully stated, the comparison is as follows:

	1883.	1882.	Inc. or Dec. P. c.
Earnings.....	\$4,775,380	\$4,671,179	I. \$104,201 2.2
Expenses.....	2,632,756	2,638,317	D. 5,561 0.2
Net earnings.....	\$2,142,624	\$2,032,862	I. \$109,762 5.4
Eight months:			
Earnings.....	\$3,258,912	\$3,147,178	I. 1,787,734 5.7
Expenses.....	21,104,925	19,601,299	I. 1,503,626 7.9
Net earnings.....	\$12,153,987	\$11,869,879	I. \$284,108 2.4

All lines west of Pittsburgh and Erie for the eight months of 1883 show a surplus over all liabilities of \$557,180, being a decrease of \$64,722 as compared with the corresponding period last year.

Philadelphia & Reading.—It is stated that this company will give its new consolidated mortgage bonds in exchange for the \$2,500,000 income bonds now outstanding. The object of this exchange, it is said, is that the company desires to make a scrip dividend in January, and that, under the terms of the income bonds, interest will have to be paid on those bonds before any dividend can be paid on the stock. This statement is, of course, a rumor only.

The full report of earnings for August has not yet reached us, but a dispatch from Philadelphia, Aug. 27, says: "The gross receipts of the Philadelphia & Reading Railroad Co. for August are officially reported as \$3,538,032, and of the Coal & Iron Co. as \$1,866,104. The expenses of both companies are given as \$3,351,559, and the net earnings \$2,052,578, being an increase as compared with the corresponding month last year of \$881,279. The net earnings for the eight months of the year, as compared with the corresponding period last year, show a gain of \$1,817,929. This statement includes the following business of the Central Railroad of New Jersey: Gross receipts, \$1,256,335; working expenses, \$565,311; net earnings, \$691,024; rental for August, \$452,043; profit for month, \$239,081. These earnings are included in the general statement above."

Portland & Ogdensburg.—A dispatch from Portland, Me., Sept. 21, says: "At an informal meeting of citizens to-night the Hon. W. L. Putnam appeared to suggest for the consideration of the city government the subject of the disposal, by sale or lease, of the city interest in the Portland & Ogdensburg Railroad. Mr. Putnam said he was not prepared to make any proposition, but indicated that if the city were disposed to consider favorably a proposal to buy or lease, it was probable that the Canadian Pacific Railroad would be prepared to make some propositions. He suggested in outline the points which, in his judgment, the city ought to insist upon as security of its present and future interests, so far as affected by the future of this property, and intimated that conditions guaranteeing these would not be objected to. The purpose of the meeting was merely to make suggestions, and no action was taken, and a meeting will be held when members of the City Council have had opportunity to talk over these suggestions with citizens."

Port Royal & Augusta.—A circular from President W. G. Raoul announces that from Sept. 15 this company operates the Knoxville & Augusta road, recently leased, as a division of its line. All debit and credit balances accruing with other roads after Oct. 1 will be settled by the Treasurer of this company.

Securities on the New York Stock Exchange.—The following securities have been placed on the lists at the New York Stock Exchange:

Canada Southern, \$6,000,000 second mortgage 5 per cent. bonds.

Shenandoah Valley, \$2,270,000 first-mortgage 7 per cent. bonds; \$6,212,000 second-mortgage 6 per cent. bonds (\$2,270,000 of which are reserved to retire the first-mortgage bonds), and \$3,500,000 income 6 per cent. bonds.

The Governing Committee also recognizes the change of the name of the Elizabeth City & Norfolk to the Norfolk Southern Railroad Co., and directed the necessary changes in the lists to be made.

St. Louis, Kearney & Denver.—This company has filed articles of incorporation to build a railroad from Norfolk, Neb., southwest to the state line in Red Willow County, and thence through Kansas and Colorado to Denver.

Telegraph Consolidation.—The New York Times of Sept. 25 says: "A general consolidation of the offices of the Bankers' & Merchants', the Southern and American Rapid Telegraph companies will go into effect Oct. 1. The men who own the first named company will control absolutely the lines of the two other companies, and its principal officers will assume charge of all the business hitherto attended to by three sets of officers. The Bankers' & Merchants' people have leased the entire building No. 187 Broadway, now occupied by the Rapid Co. It is proposed under the new arrangement, to discontinue the use of the automatic rapid system, and also to stop issuing telegraph stamps. The working force of the Rapid Co. is being reduced, about 140 men having already been dropped. A traffic arrangement has been made between the new combination and the Baltimore & Ohio Telegraph Co., somewhat similar to that which existed between the Baltimore & Ohio and the Rapid companies. Mr. J. G. Case, Treasurer of the new combination, states that contracts have been made for the construction of about 3,000 miles of new wire. There is some prospect that a union of a mutually satisfactory character will soon be made between

the National Telegraph Co., which controls the lines erected along the Nickel Plate and West Shore Railroads, and the Bankers' & Merchants' combination."

Texas & St. Louis.—The Magnolia Branch has been completed and opened for traffic from McNeil, Ark., on the main line 50 miles east of Texarkana, southward to Magnolia in Columbia County, a distance of 7 miles. Magnolia is a flourishing town, being the centre and shipping point of a rich cotton country. This branch is to be extended hereafter to Shreveport, La., some 60 miles south by west from Magnolia.

Toledo, Cincinnati & St. Louis.—A dispatch from Boston, Sept. 25, says: "Judge Baxter, of the United States Court, Ohio District, has informed Judge Drummond of the Indiana and Illinois District that on Saturday next he will remove Mr. Dwight, now Receiver of the Toledo, Cincinnati & St. Louis Railroad, from the receivership of the road in Ohio. He has asked Judge Drummond to meet him in Toledo next Saturday to confer upon the question of appointing a new Receiver for the entire system."

A meeting of about 30 stockholders in this system was held to-day, John F. Osgood presiding. It was voted that a mass meeting of the bondholders be held in Boston on Thursday next to take action looking to the protection of their interests. Henry D. Hyde advocated several plans for a reorganization, but Mr. Osgood expressed the sentiment of the meeting when he declared that he should oppose any reorganization at present, preferring to trust his interests with the Receiver. He had written to Mr. Dwight to have him bring suit against delinquent subscribers to the debenture bonds, who now owed the company \$840,000, and Mr. Dwight had replied that he would bring an action to collect this money were the matter of the receivership settled. It is probable that Thursday's meeting will result in the employment of counsel to represent the bondholders' interests before the courts."

Union Pacific.—This company has lately completed a spur track from the transfer station near Council Bluffs, Ia., eastward into that city. This track is 1½ miles long, and a station is to be erected at its terminus to accommodate the local freight and passenger business.

Track on the Oregon Short Line is now laid to Caldwell, Idaho, 15 miles northwest from the late terminus at Kuna, and 463 miles from the main line at Granger. Caldwell is at the crossing of the Boise River, and is the station for Boise City, the capital of the territory, which is about 30 miles eastward up the river.

Vermont & Canada.—A circular has been addressed to stockholders by a committee of the board, asking them to attend the annual meeting, Oct. 18, in person, or to send their proxies to the committee. After recounting the circumstances under which the compromise agreement with the Consolidated Railroad Co., of Vermont, was approved, and saying that it was accepted by the Vermont and Canada Co. in good faith, the circular says:

"The agreement to exchange our stock for bonds, and to mortgage our road to secure the bonds, was based upon the consideration not merely that we were to receive \$1,000,000 in bonds, but also that the trust-debt claims, for the enforcement of which the Langdon suit was brought, were to be released. That suit is still pending, for some reason that governs the parties with whom we are dealing; and, so long as it is, those claims cannot be considered as released. We are not informed what the Central Vermont Railroad Co. intends to do with that suit; but Mr. Langdon himself, a large stockholder and director in said company, as well as in the new Consolidated Railroad Co., of Vermont, is creditably reported as asserting his determination to avail of the full benefits of the Supreme Court decision in said cause, which, of course, will antagonize the concession involved in this compromise, and, if insisted upon, will necessarily defeat it. Other holders of trust-debt securities announce a similar purpose. The Langdon suit is, therefore, an obstacle and menace, which we were given to understand would long ago have been removed. You have voted the mortgage of your road, and the release of your past and the reduction of your future rental; and, when you have parted with your stock, you will have done everything on your part to fulfill the terms of the plan of settlement. On the other hand some of the trust creditors are keeping up that suit and holding possession of the roads as before the settlement. In fact the receivership is withholding both roads from the Consolidated Co., thereby rendering the mortgage wholly inoperative as security for the new bonds; because, without possession of either roads or earnings, the Consolidated Co. will have no means of paying either the bonds or interest. When you have parted with your stock you will no longer have power to enforce the fulfillment by the trust creditors of their duty to discharge their claims. You can do this now only by retaining control of your property for that purpose. Your rights as stockholders can be asserted only through your directors. Hence the importance of choosing men who have no interests to conflict with yours is apparent. The directors of the Central Vermont Co. and of the Consolidated Co. are the same persons, and two of those directors now hold more than one-quarter of all the shares in our company. Unless you choose to prevent it they can easily gain control of this corporation at the coming meeting. It seems to us that you would then be powerless to enforce the completion of the compromise by the discharge of the trust debt in which they are so largely interested."

"The Hazard suit, so called, brought by one of our stockholders to invalidate the mortgage, is still pending, notwithstanding the denial of the injunction. It may be carried to the United States Supreme Court, and there it may be held that the new bonds have no security. This possibility will be given such weight as you choose in considering whether or not to exchange your stock so long as any obstacles to the complete fulfillment of the compromise exist. The directors had earnestly hoped that, before the time for your annual meeting, all occasion for further negotiations or contests would have passed, and that you would be in possession of a valid and valuable, though diminished, security, and in the enjoyment of its income. They yet hope that concessions by dissenters on both sides will make this result soon attainable. But, so long as uncertainty of it exists, and further parley or struggle may ensue, the control of our company should remain distinctly in its own interest, and not be suffered to fall into the hands of the other party to the compromise or controversy. At least, so it seems to us."

Vicksburg, Shreveport & Pacific.—Track-laying on this road was recently commenced and the rails are now reported down from the old terminus at Monroe, La., westward 21 miles. At this point a little delay will be caused by waiting for the completion of a bridge. The grading is now substantially completed on the whole extension of 96 miles from Monroe to Shreveport.

Wisconsin, Pittsville & Superior.—The grading of this road is now completed from Remington, Wis., on the Wisconsin Valley Division of the Chicago, Milwaukee & St. Paul road, northward to Pittsville, 11 miles; and iron is laid to Dexter, 6 miles from Remington. Work is to be continued to Marshfield on the Wisconsin Central road, 17 miles north of Pittsville.